Rocky Mountain Medical Journal

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Publication Office

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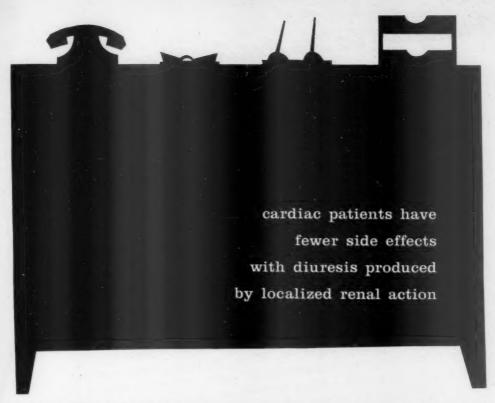
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for September, 1956

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AL

Erythromycin in the treatment of osteomyelity co

8/3/55

CASE SUMMARY

On 6/2/55, patient, male, age 28, fell on an old fracture and refractured the middle third of the right femur, superimposed on an old osteomyelitis.

On 7/7/55, the wound was saucerized and a hemolytic S. aureus (coag. +) was isolated from the osteomyelitis. Disc sensitivities were: penicillin, 10 mcg.; tetracycline,

On 7/15, the patient was placed on erythromycin therapy 400 mgm. q. 6. h. Patient afebrile after erythromycin started. X-rays showed evidence of healing with callus formation. No septicemia and clinical evidence indicates control of the infection.

On 8/3, the cast was removed and leg recast. Wound was in good condition with minimal drainage.

W

S

Diagnosis: fracture middle third of right femur, complicated by osteomyelitis.

Result: erythromycin aided healing of the old osteomyelitis and kept the infection under control.

* Communication to Abbott Laboratories

specific against coccic infections

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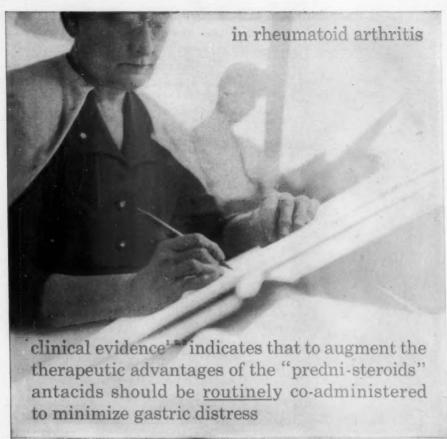
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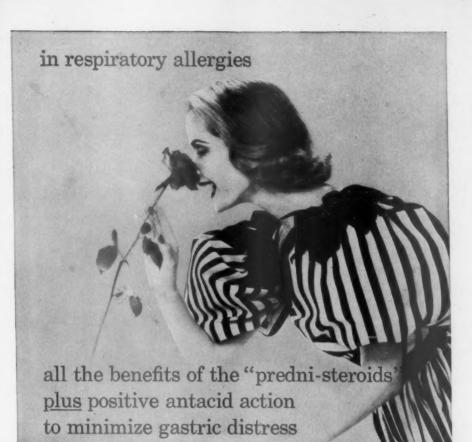
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References: 1. Boland, E. W., J.A.M.A. 160:613 (February 25) 1956. 2. Margolis, H. M. et al., J.A.M.A. 158:454 (June 11) 1955. 3. Bollet, A. J. et al., J.A.M.A. 158:459 (June 11) 1955.

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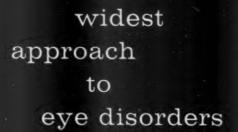
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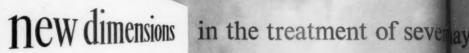
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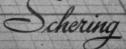
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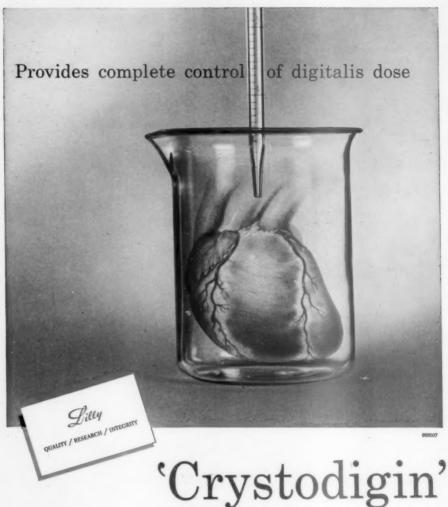
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TH ANNIVERSARY 1876 . 1956 / BLI LILLY AND COMPANY

EDITORIALS

T HE magazine Fortune for July presented an inspiring article, "Medicine at a New Frontier," in its science section. It discusses the nine unsolved obstinate diseases and the

Frontiers of Medicine

most promising path for medical research. The article is thoughtfully and authoritatively prepared. It constitutes a challenging

and inspiring declaration to our profession, and it contains a wealth of educational knowledge for laymen.

Nobel Laureate Linus Pauling, the chemist, is quoted concerning molecular structure of proteins, among the other substances of which man is made. The American Foundation, a small research organization, has published a report called Medical Research: A Midcentury Survey, the results of a fifteenyear study upon the major unsolved problems-cancer, infertility, arteriosclerosis, hypertension, rheumatic syndromes, tuberculosis, viruses, chronic alcoholism, and schizophrenia. Conquest of these diseases and the suffering they entail depends upon research, which is nearer to its infancy than to its maturity. Despite antibiotics, ACTH, Salk vaccine, epidemic control, and increased life span, the greatest conquests lie ahead. For example, bacteria may be controlled to some extent, but not destroyed, because of resistant strains; asthma and arthritis may now be modified, but not subjugated.

Biology is a study of fundamental life processes, and medical research is a study of health as well as disease. Its scope is practically unlimited. Abnormal growth of cancer cells might be revealed within a study of cellular growth of sea urchins; mysteries of the human brain could be revealed within the living structure of the squid—and so forth, through myriads of possibilities and potentialities. Why are viruses inert outside the living cell, but living forces within it, "on the borderline between the living and non-living"? Biology is thus a most complex

science which must include psychology, environment, physics and chemistry within a living organization of normal and abnormal conditions. Even enzymes and hormones, those catalysts and instruments of metabolism, can determine basic changes which mean sickness or health.

The American Foundation sponsors the proliferating medical research which is needed to prevent a lag in basic discovery. But it is too small, and about one-half of the medical schools in the United States lack funds necessary for fundamental work. Along with the needs of the American Medical Education Foundation for basic medical student education, to which we have all contributed, funds for research comprise one of our profession's greatest needs.

Changes which make the difference between a well and sick human being take place within the cells. We need a fuller knowledge of the mechanisms whereby the changes occur. For example, cancer research must proceed along the action of external chemicals, sex hormones, viruses, enzymes and nucleoproteins and the role they play in basic growth. Hereditary susceptibility, stress, environment, and nutrition may somewhere contain the "trigger" effect of cellular mechanisms. We need drugs and vaccines which will alter affected cells without destroying unaffected cells. Problems of infertility and diseases attendant upon conception, pregnancy, and birth must be included. In circulatory diseases, little is actually known of function and structure of dietary fat, cholesterol, and protein with arteriosclerosis. Is hypertension a disease or a symptom; does it precede, follow, or accompany arteriosclerosis? There must be a common denominator concerned with connective tissue and protein metabolism which is concerned with rheumatic fever and arthritis. Why are some children susceptible to streptococcic infections and others are not? Tuberculosis is still virulent, bringing social loss and suffering probably equaled

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only in mental illness. This fact is contrary to the prevailing belief both in and out of our profession.

Where do viruses come from; what are the interrelations of the various types; what are the peculiarities of their transmission from one host to another; what is the relationship to the basic processes of change in living things? They might even provide a key to the question of what life actually is. Do they produce nutritional deficiencies, biochemical defects, and metabolic disturbances in the brain and other organs? What, if any, relationship do they have in brain disturbances, psychoses, and alcoholism? We are hearing more of stress and the mechanisms whereby it affects metabolism.

The layman cannot appraise merits of layman certainly cannot appraise merits of research projects and particular scientists. But as a citizen and in his personal contributions and direction of charitable funds. he must realize that the most productive centers toward realistic answers are medical schools and universities. He must know that "second-class research makes for secondclass doctors," and men rather than projects should be selected for his financial and physical support. As the layman is headed along these lines, he "helps to deliver himself and his fellow men from suffering more than he could from any other means." We are indebted to Fortune magazine for this splendid article.

"The writer does the most who gives the reader the most knowledge and takes from him the least time."—SIDNEY SMITH.

WE HAD the good fortune to attend the Annual Session of the American Medical Writers' Association, where were gathered as a composite group, editors, free lance

Why Write* writers, feature story writers, lay health writers and writers for house organs.

Never have I seen a more enthusiastic group searching for better ways to speak the truth, in a more understandable way, that physicians and the public at large may learn how to live longer, happier and healthier.

From coast to coast and the Great Lakes to the Gulf, men and women became just

students, again learning with the eagerness of a child in a kindergarten, what makes a Medical Journal tick and what puts scientific discoveries across.

What did they do? From copy to galley proof through composition, style, tone, mode and with an accent of Shakespearian drama, emphasis on simplicity in word and language was stressed, to better convey on paper the spoken word in the simplest and most effective manner.

Thus, those of us who might gain new knowledge with the least effort in the shortest possible time, were not to write two words when one would do.

With five guide posts, namely: what, when, where, why and how, let's take a look. Whom do you wish to reach? If you think you have something you ought to tell another physician, it most likely would be interesting and valuable to a lot of physicians. Tell it to him specifically on paper, as though you were talking to him directly.

You know he is a very busy man and so you wouldn't waste his time and you get right to the point. What is the point?

The great Voltaire, in writing to his friend, apologized for such a lengthy letter, saying "If I had more time, I would have written you a shorter letter."

Ideas on paper can be no greater than their creator. Readers have one interest; namely, self-interest. What interests you? If so, it most likely interests him, but this is not all.

Did you save your patient's life? Did it stop him from worrying? I once knew a physician who told me and I quote, "Each patient is a new experience for me." Are you as glad to see him as he is glad to see you? Well, then write his case history. Read it before your Society. Have it published, if you can. You and your good work will be known to thousands. Write, rewrite, delete, then cut in half. Illustrate it with pictures, or a drawing, if that will make it clearer or more understandable.

An old Chinese proverb says: A picture is worth a thousand words.

[&]quot;This splendid editorial was noted in the Maryland State Medical Journal and the Virginia Medical Monthly. It is printed here by permission of its author, Dr. Leslie E. Daugherty of Cumberland, Maryland.

THESE columns in the past, and again recently, have commented upon advantages of local anesthetic. We have mentioned its simplicity, convenience of hemostasis when

The Art of Local Anesthesia a few drops of adrenalin are added, economy to the patient and improved postoperative well-being

among other advantages. The latest discussion was concerned with surgeons being penalized for conserving the funds of insurance carriers by using local anesthetic and outpatient services in lieu of general anesthetic in the main operating room.

Obviously there are other editors who share those opinions. A few months ago an editorial entitled "Local Anesthesia—A Lost Art" appeared in The Journal of the Florida Medical Association. It is quoted as follows:

"Some months ago, an anesthesiologist was approached by a surgeon with the following query, 'Will you handle Mrs. X in the morning, she's a rather difficult problem?' The former consented readily (the operation was posted as the removal of a growth on the face). Thinking that the growth was malignant and that possibly its removal was to be combined with a neck dissection, he thought little of the request. The patient in question turned out to be 84 years of age. She had been digitalized for the previous eighteen years and was at best a very poor candidate for any type of surgery and an extremely poor anesthetic risk. On further inquiry, it was discovered that the excision of a small nevus was being done at the patient's insistence since she feared the development of cancer. The patient had not anticipated general anesthesia and was well pleased when she discovered that she did not have to go to sleep. The surgeon was somewhat abashed when the suggestion was made that local anesthesia be used. Under many circumstances, the very best anesthesiologist is no substitute for a properly administered local anesthetic. Yet in the past twenty-five years, surgeons have been 'slipping away' from the use of local anesthesia, some even reaching the point of apparently forgetting that local agents exist."

Choice of anesthetic becomes, to a tangible extent, a matter of habit and convenience. Let us be willing to take a bit more time, if necessary, and consistently invoke the more gentle touch and care—and utilize more local anesthetics. The better anesthetists would gladly be less busy! Our patients will appreciate a more favorable postoperative gastronomic situation; many, to their advantage, will be earlier mobilized and home sooner. They will particularly appreciate the economy of money and of time.

Without thinking too wishfully, the latter consideration may finally dawn upon Medical Directors and Adjudication Committees who will come better to know their participating surgeons as the Plans grow and the years unfold!

A GOOD thought appeared editorially in a recent issue of the Journal of the Medical Society of New Jersey. It is entitled "The Romans Had a Word for It." The word

Placebo—

I Shall Please

placebo means "I shall please." Every disease has its emotional component; every drug has an "emotional overtone."

The two components can rarely be disentangled. It is believed by some that intentional administration of placebos is immoral. Granted—if the patient is told that he is getting something with alleged certain or special merit! However, relief of symptoms is noble unless there is misrepresentation. Our fellow editor avers that one reason doctors and pharmacists are poor patients is that the "magic" of medicine is dampened by familiarity.

A psychologic chain reaction may be started by many things, among which may be a placebo. Confidence, hope, and the doctor's personality cannot be separated from the precision of a drug or instrument. The author states that a placebo—given with restraint and artistry—has a definite place in every doctor's formulary. He hastens to mention that he does not say armamentarium instead of formulary, and urges us not to sell it short.

ARTICLES

Emotional III-Health in Industrial Society*

Rutherford T. Johnstone, M.D. LOS ANGELES

The frightening social and industrial evolution through which our world is passing has engendered anxiety states among people in every industry and walk of life. Organic diseases are simulated thereby, and every physician should provide the time and study required properly to distinguish between them and functional disorders.

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m To}$ THE 1955 graduating class of the California Institute of Technology the commencement speaker gave this advice, "You men of science have given us a dreadfully complicated world . . . based on the lack of understanding the human soul. We need to learn to deal with stress in human beings. You budding scientists should branch out into the field of human problems." During that same week before the Merchants and Manufacturers Association of Los Angeles a professor from the Harvard School of Business said, "Today we are face to face with the tragic failure of our business and labor leaders to meet the paramount issue of our time-to enable people to get spiritual as well as material satisfaction out of their daily work experience."

Public interest in the existing stress and tension of our people is high. If the educator, the minister, and the social scientist wonders why the world lies abed with nervous prostration, where is the voice of medicine? Is it indifferent to the challenge? Not completely so. All of you either heard or read the inspiring inaugural address of Dr. Elmer Hess, "Medicine's Proclamation of Faith." Led by a man so im-

bued, medicine will be stimulated to assume greater responsibilities in the field of human relations. Then, too, organized medicine recognized the implications of environment upon health when, in 1937, the American Medical Association created the Council on Industrial Health. The present day magnitude of its activities is amazing. Nevertheless, despite official concern in this regard the profession as a whole has been largely indifferent to the effect of human relations upon health.

Evolution of Social Unrest

Social unrest is not peculiar to our times. History's seismograph has recorded former quakes of appreciable size in many lands. But today the cumulative tremor is at the highest peak ever traced. Obviously time cannot be taken to consider all the sources which shake this world's social structure but we can search for the major causes of human quakes. To understand the present we must look at the past. Initially ours was a pastoral society of rustic, idyllic simplicity. Man supplied all of his own wants. Then the potentials of the good earth led to agriculture which added to but did not displace the pastoral scene. Competition, animosity and obeisance to a superior human was largely absent. Just when

^{*}Read by invitation before the Utah State Medical Association Convention, Salt Lake City, Sept. 8, 1955.

the master-servant relationship became a source of friction cannot be dated but history ascribes its significant rise to the feudal system of the Middle Ages.

With the invention of machinery there occurred the most abrupt change in man's pursuit of a living. With the industrial revolution came oppression and further subjugation. Yet, until comparatively recently, life in America remained largely pastoral and agricultural. We had unlimited acres for tillage and vast ranges for our cattle. Ours was a frontier for freedom, free of strife which infested the crowded industrial cities of Europe. That we felt our way of life offered surcease to the oppressed elsewhere is testified to by the inscription placed on the base of the Statue of Liberty on Bedloe's Island:

"Give me your tired, your poor,

Your huddled masses yearning to breathe free.

The wretched refuse of your teeming shore Send these, the homeless, the tempesttossed to me:

I lift my lamp beside the golden door."

Yet is was not designed that America should remain idyllic. Following World War I came technological changes. Today because of what the chemist, physicist, and engineer devise man can no longer stand alone. No longer an independent member of a small social unit, the family, he is now a dependent part of a world society. In the evolution of social unrest none is less significant than the modern media of communication. Since the beginning of time men have fought for their rights but heretofore their pleas were not heard beyond the sound of their voices. A social, economic, or religious crisis caused no tension elsewhere. impact of importance had spent itself in the time interval of transmission. Today the beggars in Bagdad, the destitute in Delhi, or the marauders in Morocco hear minutes later what has transpired in Washington, London, or Geneva. Too often what they hear foments suspicion and unrest.

The American Scene

In addition to the problems of the world, we in America react to stress situations which are typically American. I could

refer to such pot-boilers as McCarthyism, the Supreme Court decision on segregation, and other emotional conflicts which are a constant subject of conversation. But I prefer to speak about those sociologic aspects of unrest which have escaped the attention of most physicians yet which produce symptoms simulating organic disease. They are rarely, if ever, dealt with in our medical journals.

The first of these is homesickness-a loneliness gnawing at the spirit of millions of men who have migrated from their old home towns. Better opportunity elsewhere has caused the greatest migration across this nation that it has ever known. Leaving their friends the butcher, baker, barber or banker; the church, lodge or bowling team, they suddenly emerge in a vast city of indistinguishable houses and unfamiliar faces. Failure to attain that which seemed promising and without friends, these migrants become morose, discouraged, and despondent. They often turn to the neonlighted cocktail bar where eventually too much drinking and wrong companions disrupt a once happy family. Murder, suicide, and rape have been traced to this cause. This one facet of our present society is worthy of your consideration.

Another recent change in our social scheme is employment of mothers of young children. This dual activity can be successful but more often it is not. In my practice I have sensed too many instances of frustration in women traceable to the futility of attempting to be a wife, mother, and riveter. Ideally a mother dedicates her life to making a house a home, however humble, in which she is ever present to sympathize, guide and discipline. Ideally within that home is family worship, reverence for God, His laws and the laws of man. Lacking these, a home becomes an unhappy abode to which a tired mother returns from eight hours of work to take up another job. Keep this in mind when your female patient presents symptoms without organic basis.

Still another change in our American way of living is the prolongation of life resulting in an increased number of senior citizens. For such, life has been prolonged

but participation in the enjoyment of life has been curtailed by our mores and attitudes. Frustration occurs in our elderly population because of the lack of adequate social outlet as well as a provision for new experiences, new insights, and opportunity for accomplishment. As doctors we have been concerned with maintaining an equilibrium of their vegatative functions (i.e., nourishment, physical health, and sleep) but not enough is being done for their minds. With this group we have done little to achieve adequate communication between their thinking and ours. worries, disappointments, and fears we lightly brush off as due to cerebral arteriosclerosis. Their inner life and behavior is not probed. It is just accepted as senile. Towards this group labor and management need to join in revising the existing employment and retirement policies. Medicine, too, must remove the elderly citizen from idleness. I believe it was Stieghitz who said that "medicine has given length to life. Now it must give depth and breadth." Certainly in our social scheme the dignity of man reaches its lowest level in our aged segment.

I cannot leave the broad consideration of the American scene without brief mention of the impact automation portends. Our scientists and industrialists proclaim its promised benefactions. Our labor leaders question this. The threat and promise of automation have haunted economic thinking since James Watt utilized steam to reduce man hours and labor costs. Its advocates claim it it will lessen greatly hunger throughout the world, increase income, and reduce the work week. If this be true we will have to adjust our social schemes. The implications in this regard are far reaching as intimated by a comment in Time Magazine (Aug. 15, 1955), when it refers to a Unitarian minister as stating that "Increasing automation, leading to a shorter work week, may force churches to shift their major weekly services from Sunday to Thursday night by 1970. It is, indeed, arrogant of churches to assume they have the right to impose the village, agricultural type of Sabbath of ancient times upon modern

man, urban and industrial people. Intelligent churchmen will begin today to prepare for tomorrow's three-day weekend."

Labor, in contrast to management, is apprehensive. Its leaders look upon automation as the Second Industrial Revolution. At the 1953 UAW-CIO convention the following resolution was passed: "Properly used, they can advance by many years the realization in America of man's age-old dream of an economy of abundance. Improperly used, for narrow and selfish purposes, they can create a social and economic nightmare in which men walk idle and hungry—made obsolete as producers because the mechanical monsters around them cannot replace them as consumers."

Why do I take note of automation in this paper? For the simple reason that the fear of its consequence has already trickled down to the average laborer. Younger workers have told me that they fear it will cause them to again move elsewhere. Older workers fear they will be displaced by an electronic gadget. To most of us automation would seem a further step in our progress but it will call for adjustment in our industrial society. Until that adjustment is proved good, the worker will worry.

To this point I have tried succinctly to scrutinize the social span of man from the Eden of Adam to the atom of man on the white sands of Alamogordo where he demonstrated his ability to destroy himself. It has been but a brief review of the general aspects of our social evolution. It is now time to narrow the focus to the more intimate climate in which man works.

The Industrial Scene

There was a time when the term industry meant mining, milling, and other activities involving heavy, hazardous machinery. There was also a time when industrial medicine meant only the surgical care of the traumatized workers. In some quarters that opinion still persists. Indeed, most doctors feel they are not identified with industrial medicine or, what should be more appropriately termed, occupational medicine. They manifest disinterest because they are not practicing in a highly industrialized

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community or on the pay roll of industry. Such an attitude is excusable only in the pediatrician. Actually, practically every patient of practically every doctor is engaged in some type of occupation. This being so, the obligation to actively participate in the occupational health program should be apparent.

Occupational medicine offers the greatest opportunity for practicing preventive medicine by utilizing hygiene, engineering, and the disciplines of other forms of medicine. But at this time the subject of interest is the occupational etiology of emotionally induced illness or social misbehavior. It is every doctor's problem and not limited to the psychiatrist. The subsequent remarks are based upon twenty years' experience in observing industrial workers and not from group studies or surveys. Psychiatric terms will be avoided because I do not understand most of them and my sermon is not to psychiatrists but to those in general practice primarily. Certain classifications I am about to make are my own which probably no psychiatrist would approve.

First of all, the profession is fairly familiar with the tension headache, the ulcer, the coronary, nervous breakdown, or alcoholism in the executive group. Much has been written about "executive stress" in those on the way up as well as in those who have reached the top only to find themselves incapable of fulfilling the assignment. Even those who are fully capable develop a fear of failure. Physicians are less familiar with the emotional conflicts of men on the lower rungs of the industrial ladder. It is these I wish to consider.

Basic to an understanding of human behavior is the realization that very few enjoy the privilege of doing the kind of work they want to do when and where they want. Herein lies a major conflict. Lacking sufficient education or specific training induces an awareness of insecurity. Even at low levels of intelligence workers sense the servant situation—either a man or a machine is their master.

Likewise those with instinctive energies find that most jobs offer an inadequate outlet. Monetary gain and fringe benefits do not

give the worker spiritual satisfaction from his daily work experience. Failure to gain this and the monotony of repetitive effort lead to a fatigue syndrome. Coupled with monotony of work is the lack of incentive. Any man capable of some degree of speculation likes to contemplate his utility. What does he contribute to the ultimate product? Is his part of the production appreciated? If his superiors are not interested in him and his security is dependent entirely upon the protection given by a union contract, the worker loses all sense of his own importance. His thinking leads him to fear that he is only a number listed on the pay roll of some impersonal thing called management.

As time passes on the victims of this fatigue or boredom become listless, depressed, moody and some develop vague pains or complaints simulating organic disease. They are the neurasthenics of industry and exhibit the typical dysfunction of the various systems of the body as does the idle female bridge player who transfers her boredom to systemic dysfunction. The profession has been alerted to her but unfortunately not to the industrial neurasthenic.

In contrast to the fatigue syndrome but still with some overlapping features is the anxiety state. Members of this group invariably have a greater degree of skill, aptitude, and cultural background. Candidates for the anxiety state yearn to be more than a number; they want to be a member of the team. To them access to communications is important. They desire to hear for themselves instructions from the coach and then, as quarterback, call signals for others to follow. From this group come the lead man, the foreman, the supervisor and labor steward. They have climbed several rungs up the ladder and are reaching for the next higher one. Members of this group are perplexed not only with their own problems but of those whom they supervise. They are expected to resolve other problems but have not been trained in counseling or leadership. This gives them a sense of inadequacy and adds to their own frustration.

Victims of the industrially created anxiety state are boastful, aggressive, domineering and resentful. Unlike the promising executive who is extended every consideration in his training years, those in the zone between management and labor often fight a lone battle. Minor frustrations lead to inability to cope with tight situations. Being sufficiently well read and interested in world and national affairs, the tensions outside industry are mixed with those of occupational cause. Eventually members of this group develop the ulcer, coronary, or other executive emotionally created ills without benefit of title.

There are several other causes of emotional ills or human misbehavior difficult to classify. One is industrial noise. Aside from the disturbance to the hearing mechanism, the impact of noise upon the central nervous system leads to bizarre complaints. Too frequently the worker fails to recognize noise as a cause of his ill-health. In cases difficult to diagnose it is wise for a physician to inquire about the factor of noise in the working environment.

Then there is that jarring, disturbing factor of people — crowds of jostling, blabbering, blasphemous, discourteous bodies rushing into work, again at noon hour or at the end of the shift. This observation may impress you as insignificant but I dare say you would not operate with efficiency if you were to combat the same circumstances at the hospital entrance or in its halls each day or several times a day. To one who has worked in the quiet atmosphere of the farm or a small plant it can be annoying. An annoyance constantly repeated becomes a problem to which one either adjusts or becomes its victim.

The Solution

It is not sufficiently apparent to our profession that organized medicine constitutes a powerful means of alleviating world-wide unrest. Fifty years ago Sir William Osler observed, "Medicine is the only world-wide profession actuated by the same ambitions and pursuing the same ends. This homogeneity is not shared by law and not by the church, certainly not in the same de-

gree. A united profession working in many lands has done more for the race than any other body of men."

Implementing the idea expressed by Osler is now under way. In the July 30, 1955, issue of the Journal of the American Medical Association we find an article opening with these words, "Health is a subject in which all people of the world, irrespective of color, race, and political philosophy, have a common interest. In fact, international cooperation in the field of health work may well prove to be a common ground for the development of understanding and cooperation that could extend to more difficult and controversial areas. This is a field in which the United States has the ability as well as a unique opportunity to assume world leadership. In the attainment of these objectives, physicians have very special opportunities and responsibilities." Later on in this significant statement, "currently it (World Medical Association) is undertaking leadership in the field of occupational health on a world-wide basis." (Due to the foresight of Dr. Louis Bauer, the executive secretary, and aided by Dr. Carl Peterson, secretary of the Council on Industrial Health).

But there is a paradoxical situation in this which causes me some concern. Many physicians who wear or are privileged to wear the pin signifying membership in the World Medical Association do not interest themselves in the origin or nature of unrest in their own community. It is rather odd that the World Medical Association has "taken leadership in the field of occupational health" whereas, within the United States on a community basis, the profession has evidenced little interest. But that it must is the claim of this paper.

How can the individual doctor eradicate unrest, fear, and frustration? Is the art of medicine as we once knew it sufficient? Or, to rephrase that question, is there now sufficient art in the present practice of medicine? Recently Dr. Arnold O. Beckman (Ph.D.), owner of Beckman's Instrument Co., addressing the Society of Security Analysts stated, "There is too much art and not enough science in medicine." He told his audience that he is out to find scientific

methods to substitute for art and cited his firm's flame spectrophotometer that analyzes blood in a matter of minutes for some forty chemicals needed by the human system. He prophesied that scientific devices would revolutionize the medical profession by determining what elements that human system lacks to stay healthy. He did not state whether his instruments would be able to detect the absence of faith, hope, or security.

Yet we physicians cannot be too scornful of Dr. Beckman's statement since we are becoming instrumentalists. Within the past month I underwent a complete health inventory. In one-half hour a very able internist had completed his part of the process but it took three days to complete the laboratory and instrument aspect of the survey. All I learned at its completion was that I had wax in my left auditory canal. It could be that if our interest is to be extended and confined to organic disease, per se, slide rule medicine will become the new order.

Happily we can all feel certain that the pendulum will swing to a proper balance between the art and science of medicine. With increasing evidence that individuals of our industrial society are suffering from emotional ill-health the profession will meet the challenge with the proper methods as it always has.

In suggesting a solution the title of this paper is a bit deceptive. I was once advised that to secure an audience the title of a paper should be sufficiently confusing to incite curiosity. The thesis of this paper does not contend that to operate efficiently within our present social climate a physician be fully trained in the disciplines of anthropology, ecology, ethnology, sociology or psychiatry. It is proposed, however, that we acquaint ourselves with a few of the utilities these provide. I suggest that the American Academy of General Practice at its national and regional meetings provide its members with the essentials of the behavioral sciences, that other specialties do the same. I especially advise that each physician self-educate himself. The material is accessible in a form easily read.

For example, in their College Outline Series, Barne and Noble publish a paper-bound book containing essays dealing with the application of all of the social sciences.

Actually our forebears in medicine utilized to a degree certain aspects of the behavioral sciences and also to a degree our present confreres do. But there is now need for a more intense and specific application of these disciplines. Medicine today must be broadened to include an understanding of all phases of the structure and fuction of society. In short, medicine is a function of society and all society depends upon medicine for its improvement.

A study of the behavioral sciences will equip the physician to ferret out of his patient the elusive truth, recognize his unrequited drives, the need for motivation, the cause of tension. Our present standard method of questioning or so-called inventory of systems is not of itself sufficient. We need to go further into the cultural, social, and ethnic background as well as present existing social, economic and occupational environment. The type of inquiry I recommend goes beyond the immediacy of lesions and symptoms.

Obviously, if we are to meet this challenge we will have to spend more time with each patient. This is soul-sounding work which cannot be relegated to an instrument. For the patient it can well be the spiritual pause that refreshes.

Summary

The human race is passing through one of its darkest periods in history. As a result of social, economic, industrial and technological evolution together with the interplay of race antagonism, religious antipathy and political intrigue, the world is in a state of unrest. In America, despite the opulence of the times, a sense of fear, frustration and futility stems not only from the world situation but equally or more so from the environment in which man lives and works. This particular form of ill health of which I have spoken is not demonstrable by bacteriology, tissue pathology, physiology, chemistry, radiology or any instrument

now or yet to be devised. The cause lies devoted time, and the utilization of the bein social pathology. The therapy indicated havioral sciences. The therapist is every is the art of medicine, the application of doctor.

Clinical-Pathological Conference*

Moderator: Paul I. Gans. M.D. Pathologist: E. J. Eichwald, M.D. Discussants: Edward W. Gibbs, M.D. Donald O. Schultz, M.D. M. E. Tuchscherer, M.D.

 Γ HIS case helps to illustrate three points. A person with diabetes mellitus may not have the histologic renal lesion, yet present the classical clinical features often associated with intercapillary glomerulosclerosis. Second, differential diagnosis in the patient with diabetes and associated or coexisting disease may be extremely difficult. Last, this case is an example of one of the many non-surgical conditions which may simulate an "acute surgical abdomen."

PRESENTATION OF CASE

Present Complaint: A 31-year-old man entered the hospital in 1955 because of abdominal pain and vomiting of thirty-six hours' duration.

Past History: He had had diabetes mellitus since the age of 9. In 1953 his blood pressure had been 166/80. Subsequently he had experienced a severe vitreous hemorrhage and a Bell's palsy. In 1954, examination had revealed a blood pressure of 260/120; hypertensive retinopathy Grade II; ankle edema; a residual facial paresis and a 4+ albuminuria. The clinical diagnosis of Kimmelstiel-Wilson syndrome was made at that

Present Illness: About thirty-six hours prior to admission to the hospital he had had sudden onset of pain in the upper abdomen accompanied by nausea and vomiting. The pain was localized chiefly in the right upper abdominal quadrant; it radiated occasionally toward the right scapula. Repeated attempts on the part of the patient to retain even liquids orally were unsuccessful and vomiting was persistent. The vomitus was described as being "a mixture of green fluids." He had had two normal bowel movements from the time of onset of his illness to the time of admission. Urine volume was scanty during the twenty-four hours prior to admission. He had been taking 32 units of NPH insulin daily, and he received the last dose of insulin the day before admission to the hospital

and at about the time of onset of his acute symptoms.

Physical examination revealed an under-developed, well-nourished young white male in acute distress, but conscious and cooperative. Blood pressure was 150/100, pulse 80, and respiratory rate 20. The tongue was dry and the eyeballs were soft. The epigastrium was protuberant. There was some question as to whether or not there was a mass in the right upper quadrant of the abdomen; an enlarged gallbladder or liver was suspected. Abdominal tenderness was generalized but was greatest in the right upper quadrant. Rebound tenderness was not sharply localized to the right upper quadrant. There was bilateral costovertebral angle tenderness. There was no pulmonary or peripheral edema. Rectal examination was normal.

Laboratory Data: The leukocyte count was 25,100 of which 80 per cent were polymorphonuclears. The hemoglobin was 14.4 grams per 100 ml.; the erythrocyte count was 4,400,000. Urinalysis revealed a 4+ albuminuria, granular and hyaline casts, a pH of 5, specific gravity of 1.014, but no glycosuria. The blood sugar was 48.3 mgm. per 100 ml., the carbon dioxide combining power was 24 vroumes per 100 ml. and the plasma chlorides were 585 mgm. per 100 ml.

Roentgenograms were interpreted as showing marked ileus and presumptive obstruction of the small bowel.

Clinical Course: The differential diagnosis was acute suppurative cholecystitis with empyema or obstruction of the small bowel. Fluids were given intravenously, and penicillin and streptomycin were administered intramuscularly. Attempts with fluoroscopic control to introduce a long intestinal tube were unsuccessful, and suction was maintained through a naso-gastric tube. His condition did not improve. It was decided that a laparotomy was advisable.

Operative Report: Under general anesthesia the peritoneal cavity was entered through a right rectus incision. The liver was enlarged to four finger-breadths below the right costal margin. The wall of the gallbladder was slightly thickened. The common bile duct was normal, Palpa-

^{*}Presented at the 77th Annual Meeting of the Montana Medical Association, Bozeman, Montana, on September 15, 1955.

tion revealed no calculi in the gallbladder or in the cystic or common duct. The stomach was dilated but otherwise normal. The spleen was small. The esophageal hiatus, duodenum, pancreas, appendix and colon were normal. The entire small intestine was alternately collapsed and slightly distended. There was a considerable quantity of ascitic fluid which contained fibrin but was not turbid (culture was sterile). There were no tubercles seen on the surface of the viscera. Although there was no organic obstruction, it was not possible to advance a Cantor tube beyond the descending portion of the duodenum. The patient tolerated the operation fairly well and left the operating room in a satisfactory state.

Postoperative Course: He failed to regain consciousness, became cyanotic, expectorated pink frothy sputum, and died nine hours after the operation. At the time of death blood chemistry determinations, expressed per 100 ml., were; Urea nitrogen, 48 mgm; sugar, 137 mgm; carbon dioxide combining power, 18.3 volumes and plasma chlorides, 552 mgm.

Discussion

Dr. Gans: Dr. Gibbs, will you open the discussion, please?

Dr. Edward W. Gibbs: This man of 31 had had diabetes for twenty-two years and hypertension and signs of glomerulosclerosis for two years. The Bell's palsy was probably unrelated. The symptoms of the present illness were abdominal pain, nausea and vomiting, simulating acute cholecystitis. The positive findings were hypertension; dehydration; upper abdominal distension, tenderness and rebound tenderness; albuminuria and leukocytosis. There was no peripheral or pulmonary edema, dyspnea or abnormal pigmentation. Acidosis was severe. Although the last NPH insulin had been given thirty-six hours before admission to the hospital, the blood sugar was abnormally low. The roentgenologic impression was ileus and presumptive small bowel obstruction. The significant findings at operation were: (1) the absence of any acute or chronic inflammatory disease within the peritoneal cavity, (2) nothing which would suggest retroperitoneal disease, (3) a distended stomach, and (4) hepatomegaly and ascites without a splenomegaly or lymphadenopathy.

The problem resolves itself into the differential diagnosis of hepatomegaly and ascites in a young diabetic with degenera-

tive renal disease. The hematologic diseases seem to have been excluded. A diagnosis of right or left heart failure or of amyloidosis seems unwarranted. Lipoidosis and biliary cirrhosis usually are accompanied by a splenomegaly, and a fatty liver is not tender. Other causes of ascites were not discovered. i.e., acute or chronic inflammatory disease, effusions of other cavities suggesting polyserositis, intra-abdominal neoplasm mesenteric thrombosis. Although there was no abnormal pigmentation I believe that this man had hemochromatosis superimposed on a pre-existing diabetes mellitus. It is unlikely that diabetes of twenty-two years was secondary to hemochromatosis. Hemochromatosis occurs predominantly in males, and in about two-thirds of the cases is associated with diabetes, hepatomegaly and ascites. About one-third of the patients reported to have hemochromatosis do not exhibit abnormal pigmentation of the skin. Desforges (New England Journal of Medicine 241:485-487, 1949) quoted Boulin, a French author, who reviewed seventy cases of hemochromatosis and observed that onethird of the patients were originally admitted to the hospital because of painful abdominal crises simulating acute diseases of the gallbladder. He pointed out that these patients also may present pseudo-obstruction crises and that the spasm of the intestine may at times be demonstrated by x-ray. Many patients with hemochromatosis die within a matter of hours after onset of these abdominal crises. Desforges himself presented an interesting discussion of the possible causes for the abdominal pain. The patients usually die as a result of congestive heart failure or hepatic insufficiency. One more point of interest is the fact that there is an unusually high incidence of hepatoma found at autopsy in these patients.

In conclusion, my diagnoses are: (1) hemochromatosis, (2) diabetes mellitus, (3) renal glomerulosclerosis, and (4) possibly hepatoma. Failure to regain consciousness following surgery probably was due to extreme acidosis. Although the terminal episode is consistent with an aspiration pneumonitis, pulmonary edema or infarction or coronary occlusion, I should like to sug-



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gest that autopsy revealed no anatomical cause of death.

Dr. Gans: Dr. Tuchscherer, will you present your discussion next, please?

Dr. Mabel E. Tuchscherer: The findings in the Kimmelstiel-Wilson syndrome, or intercapillary glomerulosclerosis, are diabetes mellitus, hypertension, retinopathy, albuminuria and variable edema dependent on the development of the nephrotic syndrome. Later renal failure and uremia develop. The average duration of life after the syndrome develops is six years. I believe that the diagnosis of Kimmelstiel-Wilson syndrome was proper in this case. The final illness was characterized by sudden onset of acute right upper quadrant abdominal pain which radiated toward the right scapula, nausea and vomiting. I would have considered the kidney as the primary problem and the gastrointestinal tract as secondary because of the oliguria and the previous diagnosis of Kimmelstiel-Wilson syndrome plus the history of normal bowel movements. The physical findings suggested intra-abdominal disease. The temperature record was not given. Apparently there was no serious pulmonary or cardiac involvement. Tenderness in both costovertebral angles again suggested active kidney disease. The urinalysis supported the impression of intercapillary glomerulosclerosis. Frequently pyelonephritis or necrotizing papillitis is associated with this disease. It may be difficult to exclude chronic glomerulonephritis and periarteritis nodosa but one does not consider them first when kidney disease is associated with diabetes. The patient had a definite hypoglycemia, a severe acidosis, dehydration and a polymorphonuclear leukocytosis. We do not know the serum protein and albumin or the serum sodium and potassium.

The onset of acidosis in diabetes may be abrupt or insidious and is often precipitated by infection, surgery, trauma or gastrointestinal disturbance with vomiting and reduction of food intake. Abdominal pain, nausea, vomiting and thirst are often prominent symptoms. There may be leukocytosis even without an infection. Acute inflammation in the peritoneal cavity may be simu-

lated and suspected. In addition to diabetic acidosis one must consider renal insufficiency with acidosis, dehydration and uremia. In the presence of renal failure, ketone bodies may disappear from the urine. One wonders whether enough attention was paid to the hypoglycemia. An acute onset of localized pain would suggest a surgical lesion, but any generalization of the pain would favor acidosis as the cause. Operation in the presence of acidosis would be attended with considerable risk. The hepatomegaly would have been due to a fatty liver or secondary to a nephrotic syndrome. Perhaps we should consider primary endophlebitis of the hepatic veins, i.e., the Budd-Chiari syndrome which is characterized by epigastric pain which may radiate toward the shoulder, hepatomegaly, ascites, nausea and vomiting, often shock, coma and death.

To summarize, my diagnoses are: diabetes mellitus, Kimmelstiel-Wilson syndrome, renal failure with ileus and acidosis, hypoglycemia, and possibly pyelonephritis or necrotizing papillitis. I believe the anesthesia and operation increased renal ischemia and led to circulatory collapse with the development of myocardial insufficiency, pulmonary edema and death.

Dr. Gans: Dr. Schultz, will you now present your views of this interesting case?

Dr. Donald O. Schultz: This young man with moderately severe diabetes mellitus of twenty-two years' duration had shown marked deterioration of the vascular system in the last two years manifested by cardiac and renal changes, retinopathy, vitreous hemorrhage and perhaps by the partial facial paralysis.

Diabetes with hypertension, albuminuria, and edema supports the diagnosis of the Kimmelstiel-Wilson syndrome. His terminal illness began with the abrupt onset of acute gastrointestinal symptoms followed postoperatively by pulmonary edema apparently due to left ventricular failure on the basis of hypertensive heart disease and possibly with an associated coronary occlusion. The etiology of the gastrointestinal sympoms is not at once apparent. Although he was in severe acidosis, the blood sugar was low and the plasma chloride level was

normal. Excluding coma, the three most common causes of death in diabetics are gangrene, coronary disease and infections (including tuberculosis). Available evidence and the absence of other positive findings at laparotomy suggest infection as the most likely initiating cause of his acidosis and terminal illness.

Asymptomatic urinary tract infections are not uncommon in the diabetic, and there are some other factors in this case which implicate the kidneys rather strongly, i.e., the gastrointestinal symptoms with negative surgical findings, the costovertebral angle tenderness, the oliguria, the red and white cells in the urine and the acidosis. The fulminating course would be compatible with an acute necrotizing papillitis. The lack of response to treatment including antibiotics does not detract from this possibiliy. I would propose that the following sequence of events occurred in this patient:

 Diabetes mellitus with advanced Kimmelstiel-Wilson syndrome.

2. Relatively asymptomatic pyelonephritis progressing at the onset of his terminal illness to an acute renal papillary necrosis

3. Renal acidosis with gastrointestinal manifestations.

4. Terminal acute pulmonary edema due to hypertensive cardiovascular disease and with the strong possibility of an acute coronary occlusion.

Dr. Gans: Dr. Eichwald will now summarize the pathological findings.

Dr. Ernest J. Eichwald: The autopsy was performed by Dr. A. H. Mercer; only the pertinent findings will be given. The lungs were edematus and showed an acute bronchopneumonia. The heart was markedly hypertrophied; the thickness of the left ventricle was 2.5 cm. Arteriosclerosis was generalized and marked. There were old infarcts in the spleen and in the lungs. The pancreas was normal. The right kidney was

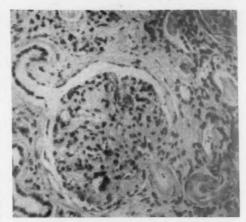


Fig. 1. Arteriosclerosis of kidney. Note hyalin thickening of arterioles at lower right and decreased cellularity of glomerulus (X 348).

markedly engorged and deep purple. It presented the picture of a recent infarction, except for a few small normal areas. The right renal artery was completely occluded by a soft atheromatous plaque. The left kidney and the non-infarcted areas of the right kidney showed advanced arteriosclerosis. The microscopic changes of intercapillary glomerulosclerosis were not seen (Fig. 1). Except for a small amount of clear peritoneal fluid, the abdominal cavity showed no abnormalities.

Summary

This was a young man with a long history of treated diabetes and cardiovascular renal disease who experienced an atherosclerotic occlusion of the right renal artery and an infarction of the right kidney—an event clinically mistakenly interpreted as an "acute surgical abdomen." Death was most likely due to a combination of diabetes mellitus, renal arteriosclerosis and infarction, cardiac hypertrophy, bronchopneumonia, acidosis and the shock of surgery. The criteria for a clinical diagnosis of Kimmelstiel-Wilson syndrome were present.

TUBERCULOSIS NOTES

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It would appear that there are well authenticated instances were malnutrition was the only probable cause of a rise in tuberculosis morbidity and mortality, though in most instances it is one of several associated possible causes. There

are also indications that malnutrition becomes operative as an etiological factor in tuberculosis only when a critical level is reached. On the other hand, it is recognized that optimum nutrition gives no absolute protection against tuberculosis, if other circumstances are unfavorable.

We Can Prevent Injuries In Automobile Crashes*

Horace E. Campbell, M.D.

Members of our profession are the natural leaders in public health education and accident prevention. Here is a fascinating review of the mechanics and physical principles of motoring casualties, plus a study of the most simple and logical way to minimize them.

NE of the inherent factors in modern rapid transportation is the need for rapid deceleration. When the speeds of motorcars were rarely over fifty miles per hour, the traditional brakes on the rear wheels were sufficient. As motorcar speeds increased, the needs for deceleration were met by four-wheel brakes. As the speeds of motorcars have increased still further, power brakes are coming into use. We have now reached the point of diminishing returns as far as deceleration is concerned. I have heard two motorists state, "You sure have to be careful with these power brakes; I threw my wife into the windshield twice until I learned to use them." In other words, the potential stopping power of power brakes cannot be utilized because the motorcar manufacturers have not installed devices to keep the passengers in place when modern brakes are used.

As long as motorcars are operated by human beings, there are going to be "accidents" and as long as motorcar speeds increase, the accidents are going to be more serious. The injuries that result from these accidents are often due to uncontrolled deceleration of the passengers. The time has come for controlled deceleration of the occupants of the motorcar in normal opera-

tion. We have long had the need for controlled deceleration of motorcar occupants in what may be called abnormal operation. As a matter of fact, we must begin to think of motorcar crashes as a part of normal motorcar operation. They are as inevitable as the use of the motorcar itself.

This is not to say we should ever cease our efforts to prevent accidents. Any highway without a dividing barrier in the middle which can prevent collisions between cars traveling in opposite directions was obsolete twenty-five years ago. Highway engineers are still shortsighted in their plans for motor traffic. They build concrete roads which last for twenty years for the cars of today, whereas they should build roads for the cars of day after tomorrow. Our examining, licensing, and insuring of motorcar drivers is in most areas simply archaic. These and other corrections must be made to reduce the number of accidents. Nevertheless, it is high time that we planned for orderly and effective rapid deceleration of the motorcar and its occupants under all circumstances.

There has been no real change in construction of the motorcar bumper since it was first installed as an accessory some thirty-five years ago. Many of our present serious crashes would be minor incidents if the bumper had been improved as much as the motor.

^{*}Read before the Sixtieth Annual Meeting of the Utah State Medical Association, Salt Lake City, September 10, 1955.

Many fatalities occur in relatively minor accidents because motorcar doors fly open at the least impact and occupants are killed by being thrown from the car, whereas those who stay in the car are very little hurt. Latches on modern motorcar doors differ slightly from latches on carriage doors of fifty years ago.

One of the axioms of package engineering is that the container must remain intact. It is impossible to transport fragile china or delicate and expensive machinery if the package opens and spills the contents. Nowhere does this principle apply with such force as in the motorcar. It has been known for years that the motorcar door which, even in 1955 cars, pops open all too easily, was the cause of much morbidity and mortality. All the stockcar racers that I have seen strap or wire the doors of even the most recent models. These gentlemen are not convinced by the manufacturers' claims that the doors of late model cars do not pop open.

For those who feel it is better to be thrown from the car, the facts are that 56 per cent of those thrown from the car are killed, whereas only 25 per cent of those who stay in the car are killed, and this is without belts. With belts, the chances are much better than this.

Seats in our modern car are marvels of comfort and luxury. Large sums are spent in advertising the choice of colors and textiles in our car interiors. Almost no thought has been given by the industry to making seats which will withstand rapid deceleration. They need only to glance at the modern airplane to find the designs and construction all ready for them. Many a motorcar occupant has lost his life because he was crushed by the luxurious and heavy seat coming loose and hurling him forward in the car. The adjustable front seat regularly tears loose from its moorings or in its adjusting mechanism and jams in its far forward position, entrapping the living and the dead together until torches and crowbars can release the victims. Few, if any, motorcar seats withstand more than 2 or 3g, and yet the basic motorcar structure is strong enough to support seats of much

greater strength. Mr. E. H. Heinemann, chief engineer of the Douglas Aircraft Company at El Segundo, has a relevant statement in this regard. "Aircraft seats were for years designed with forward accelerations of approximately 6g. A few years ago when 40g military requirements were introduced there was great objection owing to weight of additional strength. A careful engineering approach, however, indicated that 40g seats were designed even lighter than the earlier 6g seats." He goes on furto say, "The military aircraft 40g requirement would no doubt greatly improve the safety of our automobiles. This would apply to rear seats as well as front seats, because dislodged rear seat cushions aggravate passenger injury and hinder removal of occupants from serious crashes."

The instrument panel where thousands now dash themselves to extinction must be replaced by a thickly padded crash panel extending from immediately below the windshield down to and even replacing part of the floor. Thus will the blow be distributed over as large an area of the body as possible, and space for survivable deceleration provided This will require placing radios, clocks, lighters and glove compartments someplace else, but this should not be insuperable to Yankee ingenuity. The corner posts and windshield "header" must likewise be padded with as thick a pad as can be managed, for these two structures account for many injuries and fatalities. This leaves us still with the windshield as a major problem. The "popout" windshield is a partial solution. A plastic structure, stretching as much as ten inches on severe impact, and coated on the outside with a layer of glass to resist abrasion seems a not impossible solution in this day of miracles in chemistry. Whatever the methods adopted, the motorcar makers must adapt their products to Newton's laws of motion, the physics of deceleration, and anatomical facts of human beings.

Whatever may be provided for passengers, the motorcar driver is always present and should receive some special consideration. The steering wheel often absorbs enough energy to provide the margin where-

by the driver survives when others succumb. This gives the clue to the possibility that steering wheel and column might be specifically designated to be an energy-absorbing as well as guiding mechanism. As it is, the proportion of severe and fatal chest injuries is much higher in drivers than in other occupants. The use of inertia locks, graduated shear pins and a specially designed broad, energy-absorbing crown for the steering column should change this structure from a spear aimed at the heart of the motorcar driver, on which he is not infrequently crushed or impaled, into a real asset. As a matter of fact, the appearance of power steering removed the need for a steering column at all, and the wheel may be suspended in any way that is best for safety purposes.

It is a literal fact that the newer cars from 1950 on are more dangerous than the older cars. This largely is due to the steering assembly and injuries which it inflicts. One of the low-priced three actually has decorated its steering column with a pointed device. It must have been designed with complete disregard of all safety knowledge, for dangers of steering column injuries have been pointed out for years. Studies by Cornell University have yielded this sober conclusion, "When injury-producing accidents occur, occupants of 1950-54 cars are injured more often than occupants of 1940-49 cars. Further, there is a statistically significant increase in frequency of fatality among occupants of 'newer' cars."

In Life, of December 7, 1953, page 179, occurs the following story: "In 1913 Navy Lieutenant John H. Towers and an ensign were bounced out of a plane. The ensign fell to his death, but Towers hung by a strut until he landed-an incident which led to the first Navy safety belt." Lieutenant Towers fought successfully for the first aircraft carrier and retired as Admiral Towers. As a result of this early episode the use of safety belts in airplanes has become so generally accepted that there is probably not an airplane seat in the world today that is not equipped with a safety belt. It is a curious and appalling fact that the automobile, whose birth and development were almost

contemporary with that of the airplane, can hardly ever be found equipped with safety belts.

The type of airplane crash in which everyone survives is almost exactly analogous to the motorcar crash in which no one survives. The speeds (fifty to eighty miles per hour) and effects on the vehicle (local injury with basic structure remaining intact) are identical. The difference lies in that the airplane passenger is strapped in his seat and decelerates with the plane. The motorcar passenger is free in his seat and decelerates rapidly by impact against the interior of the car. If he could be made to decelerate with the vehicle he would survive, often with scarcely any injury. The safety belt is the means by which this may be achieved. William W. Harper describes this in detail:

"Let us asume that a vehicle collides with a solid fixed object at a speed of thirty miles per hour. Let us assume further that the car is crushed in a distance of two feet. This means that the velocity of the vehicle has decelerated from thirty miles per hour down to zero in a distance of two feet. This represents a deceleration rate of 483 feet per second per second. Such a deceleration is fifteen times the acceleration of gravity, which is 32.2 feet per second per second. This unit of gravity is called the g. For convenience, we say that the vehicle suffered a 15g crash.

"But how does the vehicle occupant behave in such a crash? At the moment of impact he has the same velocity as the vehicle. As the vehicle crashes to a full stop he continues forward at almost the same speed of thirty miles per hour and collides with the dash and the windshield. By the time his body reaches these objects they are at rest, or nearly so. Assuming that the combined crushing of his body and vehicle interior will reduce his velocity to zero in a distance of two inches, he will have suffered a deceleration of almost 5,800 feet per second per second, or 180gs.

"Although the occupant might have survived without injury the 15g crash of the vehicle, he cannot escape injury or death from the 180g crash of his body against the interior of the vehicle.

"The physics of injury tells us something

which seems paradoxical: "If the occupant wore the car, as he would a suit of armor, the crushing of the car exterior in a collision would absorb tremendous amounts of impact energy and protect him from bodily injury. The occupant would be spared injury unless his passenger space became extensively crushed. But for some unexplained reason the teachings of physics have never been understood or accepted by the motorist -so, rather than 'strap on' the vehicle and take advantage of its protective armor in a crash, the motorist watches the vehicle crash relatively slowly to a stop and then dashes himself violently to pieces against its interior! This makes no sense at all, but it is still standard practice after fifty years of automotive accident history."

In the United States since 1928, from 30,000 to 40,000 people have been killed and over 1,000,000 people injured more or less seriously in motor car accidents every year. The magnitude of the problem can be more easily grasped if it is realized that motorcars have killed 100,000 more people in the United States than have lost their lives in all our nation's wars put together. Mr. John A. Bruce, Denver's Traffic Manager, puts it thus, "Persons who would scoff at fastening a safety belt should remember that one person is killed in the United States in traffic accidents every fifteen minutes and that one person is injured every half minute." That this has been so, is largely, in my opinion, due to the failure of the motorcar industry to recognize its duty to the motoring public, by advocating and publicizing proved safety measures. In fact, it seems that there actually has been an organized opposition by the motor car industry to incorporation of safety developments in the motor car. It has been recommended to them time and again and they routinely refuse to make the necessary expenditures by retreating behind such statements as "much research needs to be done," "there has been no demand for them," and "the public is not ready." The fact is the motorcar industry has done practically nothing to make the public ready.

The sports car clubs of America have demonstrated the value of belts, and belts

are mandatory in all competitions under their auspices. Dare-devil stunt drivers regularly put their cars into situations comparable to highway accidents and regularly survive because they are protected by seat belts, shoulder straps and crash helmets. Indiana State Police Officers (Time, December 14, 1953, page 60) recommend that motorists wear safety belts and crash helmets. It will be a long time before the American motorist will endure the ridicule attendant upon the use of crash helmets in his motorcar, but motorcar manufacturers could begin now to offer crash helmets as optional equipment in colors and designs to match the car interiors.

In presenting the idea of safety belts, it is only realistic to emphasize that the seat belt alone is not a complete solution. If the use of seat belts could be made universal, we might then move on to the use of shoulder straps in addition, a development which is now occurring in aviation. Ideally, there should be a strap over each shoulder. A partial solution will use a strap over one shoulder, the one next to the outside of the car. Not the least of the advantages of seat belts is that they reduce fatigue on long trips, because they reduce the muscular activity needed to maintain equilibrium. This effect is particularly noticeable if shoulder straps are used in addition to lap

It is to be hoped that an immediate realization of their duty by the motorcar manufacturers will result in offering on their new models this year safety belts of adequate strength and pleasing color. For those automobiles not equipped at the factory, safety belts are available at motor supply stores. The mail order houses offer belts in three colors with complete instructions for installation.

The motoring public has now to decide how it will meet the powerful and increasing forces of deceleration which almost every motorist is called upon sooner or later to sustain. At the moment almost no provision, except a rapidly diminishing hope, is made for the control of these forces. It is possible to arrange a planned, orderly and effective control. One of these devices

is the safety belt. It seems to this writer that the engineering genius of America can provide for every motorist a comfortable, convenient, and "out of the way" version of the time-tried safety belt, which can be expected to prevent the vast majority of the deaths and injuries now occurring on our streets and highways.

Doctors from the very beginning have been motorcar enthusiasts. Also doctors know better than anyone else the tragedy of motorcar crashes. Therefore, doctors should be the first to adopt the automobile seat belt and lead the motoring public to its use. We have records now of some fifty highway crashes with belts, and the safety and protection provided is marvelous to read. Dr. and Mrs. George Spielman of Mandan, North Dakota, have reason to know what belts can do. They were setting out upon a vacation trip when an approaching car made a left turn in front of them. Dr. Spielman hit his brakes and swerved to avoid the crash, taking the ditch on the left. His vehicle somersaulted into the ditch, landing on its top. Inside, the doctor and his wife sat upside down, suspended by their belts of the shoulder and waist type. The windshield ahead of them was completely shattered. Loosening their seat belts, they crawled out through the car window, then surveyed the inverted wreck. Dr. Spielman explained that another Mandan

physician had talked him into installing the seat belts in his car. This is the second car he has owned with the safety device.

Another more dramatic case involves a two-car head-on collision. The man and wife in the car with seat belts spent the night in the hospital for observation and were released the next morning. Of the couple in the other car without belts, one was fatally injured, and the other spent two months in the hospital.

Summary

- 1. Motorcar makers will furnish a safe car if they can be convinced the motoring public wants it.
- 2. The most important item in this program is some device to hold the motorist in his seat during a crash.
- 3. The ordinary seat belt will transform our motorcar injury situation.
- 4. Doctors, who know more about motorcar crashes than any other group, are the logical leaders in the movement to make the seat belt universal in the motorcar.

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OKLAHOMA CITY CLINICAL SOCIETY

The Oklahoma City Clinical Society will open its twenty-sixth annual three and one-half-day Conference on October 22, 1956.

A large attendance is expected at this everincreasingly popular meeting held in centrally located and easily accessible Oklahoma City. It is interesting to note that at the present time Oklahoma Ciy is rated third in the nation as a convention city.

As in former years, an outstanding program of postgraduate teaching has been arranged. This includes lectures and discussion by sixteen distinguished guest speakers selected from various medical and teaching centers throughout the nation. In addition to the general assemblies, a new feature will be specialty lectures, and there will also be daily luncheon round table question and answer sessions, and a clinical pathologic conference. The entertainment will include dinner meetings, the annual Clinic Dinner Dance and Specialty Group Dinners.

A cordial invitation is extended to all physicians who are members of their County Societies to attend this meeting from October 22 through October 25.

The Conference has been approved for credit under Category I by the American Academy of General Practice.

LOW BACK PAIN

Conflict of opinion on the subject of low back pain will be with us forever unless we realize that it is behavior which disturbes the mechanics of the back, all day and every day, and that it is only through a re-education of behavioral attitudes that we will alter these mechanical faults. If I were asked to sum it up in one phase, I would say that what is wanted in order to restore a balanced equilibrium to the body is not a strengthening of muscle, but an integration of intention. — Wilfred Barlow, B.M. Oxfd., in The Lancet.

Treatment of Dermatoses With a New Antihistaminic John E. Teverbaugh, M.D. (Sandostene)*

CONCORD, CALIFORNIA

A new antihistaminic alone, and combined with calcium intravenously, has given encouragement in a series of seventy cases of itching dermatoses.

GOODMAN and Gilman state that the pharmacodynamic actions of the antihistaminics can be divided into two main categories: Those which result from the antagonism of histamine, and those which result from a direct effect of the drug on effector systems. Antihistaminic drugs are capable of antagonizing to a varying degree many, but not all, of the pharmacological actions of histamine. They can also modify allergic and anaphylactic reactions. This latter property provides the basis for their major therapeutic use. Literally scores of antihistaminic drugs are available, much to the bewilderment of the physician. All are said to be effective and relatively free of side effects, but experience has shown that these essential properties in an antihistaminic are yet to be found. This report is confined to the use of a new antihistamine, Sandostene, with and without calcium, orally and parenterally, for the treatment of itching dermatoses.

Sandostene* is 1-methyl-4-amino-N'phenyl-N'-(2'-thenyl)-piperidine-tartrate. Each tablet contains 25 mg. of Sandostene and each ampul of 10 c.c. contains 50 mg. of Sandostene in 10 per cent calcium gluconogalactogluconate. Rothlin and Cerletti2,3 reported that Sandostene has a high antihistamine activity, a low toxicity and

it has a distinct anti-cholinergic and local anesthetic action. The combination of Sandostene with calcium gluconogalactogluconate exerts a marked reduction of permeability. Huber demonstrated by means of the fluorescein test that increased permeability of the vessels is one of the phenomena associated with the allergic syndrome and that reduction of permeability was brought about by using Sandostene and calcium gluconogalactogluconate. Bigliardi⁵ reported excellent results with Sandostene alone and combined with calcium gluconogalactogluconate in treatment of acute urticaria, acute Quincke's edema, exudative urticarial eczema, drug rashes and essential pruritus. Essellier, Forster and Morandi⁶ observed good results with Sandostene orally and when combined with calcium gluconogalactogluconate in pruritus, urticaria and transfusion reactions. Thuer7 reported favorable results with Sandostene orally and combined with calcium in a large series allergic disturbances. Combes and Reisch⁸ reported a high percentage of good results and low toxicity in the treatment of allergic diseases of the skin. Baker9 reported his results with Sandostene orally, parenterally and topically in 120 cases of various types of dermatoses. He observed that Sandostene alone and with calcium, was effective in urticaria, drug reactions and in contact dermatitis. Parker10, Nase-

^{*}Furnished by Sandoz Pharmaceuticals, San Francisco, California.

TABLE 1
Results With Sandostene Orally and Sandostene Plus Calcium Parenterally

	No. of Cases	Results			
Indications		Excel- lent	Good	Poor	Complications
Eczema (Atopic)	7	4	1	2	
D. Medicamentosa	12	9	3	_	Two cases experienced dizziness and nausea but of short duration
Rhus	22	9	13	_	One case experienced drowsiness of short duration
Serum Sickness	1	1	_	_	_
D. Venanata	16	13	3	_	_
Erythema Multiforme	1	. 1		_	_
Erythema Multiforme iris	1	1	_	_	_
D. Facticia	1		_	1	-
Insect Bites	4	. 2	2	_	_
Asthma and Eczema	1	_	1	_	_
Pruritus	2	_	2	_	_
Pityriasis rosea	2	1	1	_	_
	70	41	26	3	_

mann¹¹ and Saffron¹² reported favorable results with Sandostene combined with calcium, in various skin disorders. Clein¹³ stated that Sandostene was more effective and produced a very low incidence of side effects as compared to other antihistaminics, in the treatment of various allergic manifestations.

Seventy patients underwent treatment, fifty-two cases with Sandostene plus calcium intravenously and eighteen cases with Sandostene tablets and/or Syrup Sandostene plus calcium. The disturbances treated included eczema, dermatitis medicamentosa, rhus, serum sickness, dermatitis venanata, erythema multiforme, dermatitis factitia, insect bites, asthma and eczema, various types of pruritus and pityriasis rosea. See Table 1.

Dosage

Sandostene tablets, each containing 25 mg., were administered in doses varying

from one every four hours to one four times daily. The indications for this dosage form included allergic rhinitis, insect bites, dermatitis medicamentosa, infantile eczema, rhus, pityriasis rosea, dermatitis venanata. One case of asthma and eczema was treated with Syrup Sandostene plus calcium in doses of one teaspoonful twice daily, which resulted in the relief of the pruritus. One case of dermatitis medicamentosa became sleepy, which was of short duration. Sandostene plus calcium ampul solution was given in doses of 10 c.c. daily for three or four days when the disturbance was acute, then 10 c.c. three or four times weekly until symptoms subsided. The disturbances treated with parenteral therapy included eczema (atopic), dermatitis medicamentosa, rhus, dermatitis venanata, serum sickness, dermatitis factitia, erythema multiforme and erythema multiforme iris.

Before Sandostene therapy was instituted in this series of cases, other antihistaminics were employed but were discontinued because of the high incidence of dizziness and drowsiness. Sandostene produced dizziness and drowsiness in only three cases out of seventy and these side effects disappeared quickly. Other types of therapy were used to try and relieve the stress situation and pruritus such as cortisone, which was only employed as a last resort. In my experience Sandostene plus calcium, especially when given parenterally, should be tried before cortisone or ACTH therapy, not only because of its effectiveness, but because it is free of the serious reactions sometimes observed with the use of these drugs. Calcium salts alone were also employed prior to Sandostene plus calcium, but they produced a low percentage of results. The most gratifying result experienced by the patient after Sandostene plus calcium therapy, is the quick relief of itching. Side reactions after parenteral therapy can be avoided by giving the injection slowly.

CASE HISTORIES

Case 1. Mrs. M. A., aged 78, had generalized atopic eczema for eight years. She had been studied in various clinics and since she was visiting her son in California she was not interested in any further attempt at a diagnosis of her condition. Her main complaint was the severe itching associated with the generalized eczema. An examination revealed eczema involving the scalp, face, neck, chest, abdomen, back and extremities. Areas on the face and neck were deeply excoriated and oozing. Similar areas were seen on the arms and lower legs. The patient exhibited considerable discomfort by her constant scratching. She was given 10 c.c. of Sandostene plus calcium intravenously slowly and noticed considerable relief of itching in fifteen to twenty minutes. Topical treatment consisted of Burows solution compresses and 1-2-3 ointment. She also was given Sandostene by mouth during the day and phenergan at bedtime. Intravenous Sandostene plus calcium was given weekly and the patient improved rapidly with marked decrease in itching. The dermatitis dried quite rapidly and no weeping occurred after two and one-half weeks of treatment. She then received intravenous Sandostene plus calcium at ten to fourteen day intervals and used the topical medications only if necessary. At the slightest onset of itching she promptly returned to the office for another injection. All in all, she received eighteen intravenous injections and the only reaction ever noted was an occasional warm feeling if the medication was given too

rapidly. She stated that she "was in the best condition she had known for eight years," and felt that the injections of Sandostene plus calcium was the reason.

Case 2. Mr. T. J., 26 years of age, white male, was seen on June 4, 1955, with erythema multiforme iris of five days' duration. He had had between fifteen and eighteen such episodes in the past ten years. Each episode lasted four to six weeks and often necessitated hospitalization for tube feedings, etc. Previous medication included antibiotics, cortisone, etc., which did not shorten the course. An examination revealed lesions localized to the hands, lower arms, feet and beginning lesions in the nasal and oral mucosa. There was considerable pain and edema associated with the lesions. In addition he had a muco-purulent post-nasal drip and clouding of the antral sinuses. Treatment consisted of erythrocin 200 mgm. q.i.d. and percodan for pain. He was given 10 c.c. of Sandostene plus calcium daily and in two days the lesions started to regress and were completely gone in one week. His sinus symptoms also cleared rapidly. Subsequent allergy testing showed strong reactions to house dust, grass pollens and ragweed. This was the only episode that cleared in less than three weeks. Previous medications consisted of all the known antibiotics, cortisone, ACTH, nicotinic acid and antihistamines. This patient received a total of six intravenous injections of Sandostene plus calcium with no side effects

Case 3. Mr. I. V. C., aged 33, was seen for moderately severe rhus involving the periorbital areas, arms, chest and abdomen. His symptoms were present for three days before he sought medical care. The main complaint was the severe itching and stinging of the lesions. Treatment consisted of Burows compresses, 1-2-3 ointment and phenergan at bedtime. Intravenous Sandostene plus calcium relieved his itching in fifteen to twenty minutes. This was repeated every other day for three injections and the lesions all cleared in eight days. The patient stated that the medication lasted about one and one-half days and then the itching returned.

Case 4. Mrs. I. A., aged 34, with generalized atopic eczema of several years' duration. Many allergies to foods, inhalants and pollens. Improved considerably on hyposensitization therapy and was on a maintenance dose of 20 mgm. Hydrocortisone when she was first seen. Itching and scratching were a prominent feature, and accounted for considerable factitial lesions. She was given hyposensitization therapy to the offending inhalant and pollen allergens. Avoidance of food allergens was recommended. Four intravenous injections of Sandostene plus calcium were given along with Burows compresses, a bland ointment and phenergan at bedtime which resulted in marked improvement in two weeks' time. This patient occasionally would go off , her diet and the eczema would flare up for several days. These episodes were treated with intravenous Sandostene plus calcium and she usually cleared in two days. At the present time she returns to the office and requests Sandostene plus calcium injections at the first sign of any exacerbation of her condition. She has received fifteen intravenous injections of Sandostene plus calcium with no side reactions other than a transient warmth if the injection is given too fast.

Summary and Conclusions

Sandostene plus calcium parenterally and Sandostene alone, given orally, was used on seventy cases of itching dermatoses of various causes. The relief of itching was the outstanding property of this new antihistamine when given orally or intravenously. The incidence of side reactions was remarkably low in comparison with other antihistamine drugs. Sandostene plus calcium can perhaps in some cases be used as a substitute for steroids in relieving stress and pruritus. Sandostene in its various dosage forms appears to be a potent antagonist of histamine and acetylcholine. It is anti-exudative and anti-inflammatory and reduces cell permeability.

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NOTES ON A EUROPEAN TRIP

We were traveling with a group from the Society of Clinical Surgery. There were about a dozen couples. We spent three days in London, one in Leeds, two in Edinburgh, and then went to Copenhagen to observe the surgical work there and also to attend the International Society of Surgery meeting.

It should be remembered that we visited only the university clinics in these various cities, but the practice of surgery was at a high level in all of the places we visited. Cardiac surgery, perhaps, is not quite as far along, but Mr. Brock in London has been a pioneer in several fields of cardiac surgery, and so has Dr. Crafoord and his group in Stockholm. I spent a good deal of time with Mr. Brock studying hypothermia. When we got to Stockholm, Dr. Clarence Crafoord had just been operated upon for bleeding ulcer, and in his stead we saw Dr. Viking Bjork operate. Several of our men have visited Stockholm; Dr. Blakemore was there last year, and Dr. Schnabel (the younger) is there at the present time. Unquestionably they are doing excellent work in Stockholm.

In London, Sir Arthur Porritt, who is an honorary member of the Society of Clinical Surgery, really rolled out the red carpet and put on a good program for us.

In Leeds, Mr. Philip Allison, who is soon to go to Oxford as professor of surgery, demonstrated for us more progressive thinking and experimentation in various surgical procedures than any other surgeon we saw.

In Edinburgh, I was particularly impressed with the excellence of their work and we were blessed with good weather, which apparently is not too common. Mr. Andrew Logan was doing the thoracic surgery in Edinburgh, so I spent my time with him. I was impressed with his independent thinking and his ability to carry out investigations in a thoroughly logical manner. His field is primarily in research in clinical thoracic surgery.

Of the surgeons whom I saw at work, I had the impression that the work of Dr. Eric Husfeldt in Copenhagen and the men in Great Britain and in Sweden closely approximates the type of meticulous surgery seen in this country. -Julian Johnson, M.D., Bulletin of University of Pennsylvania School of Medicine, Philadelphia.

Metamucil[®] Blends with the Intestinal Contents, Soothes the Mucosa

Metamucil is highly refined; it stimulates the bowel musculature, not the mucosa.

When you specify Metamucil in constipation management you are selecting a product which has been made at least 99.6 per cent pure through a complete process of refinement.

All possible irritants (rough parts of the psyllium seed, undesirable oils and similar materials) are discarded during the refining process. A relatively small quantity of purified mucilloid powder is the result. To this is added an equal weight of pure anhydrous dextrose to insure complete dispersion in the colon.

Such meticulous preparation assures that only the bulk-producing mucilloid portion of the psyllium seed remains and that Metamucil will act as a purely "physiologic" constipation corrective, providing bland distention to stimulate the bowel muscularis.

The Metamucil mixture (formed by adding water to Metamucil) elicits gentle colonic reflex peristalsis. Evacuations are normally formed and are not irritating. The bowel stimulation imparted by Metamucil is only sufficient to clear the colon of its contents; patients are not annoyed by the re-

peated diarrheal evacuations that result from mucosal irritation by drastic cathartics.

The blandness of Metamucil makes it an ideal choice for constipation associated with a soft diet, constipation of pregnancy and in the aged and as an aid in reestablishing normal bowel habit after anorectal surgery. Daily use of Metamucil for a limited time will often return an atonic colon to normal function.

Metamucil® is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is supplied in containers of 1 pound—also 4 ounces and 8 ounces.

G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

SEARLE

MAPS











ACHROMYCIN

Tetracycline Lederle

in the treatment of

respiratory infections

January and his associates¹ have written on the use of tetracycline (ACHROMYCIN) to treat 118 patients having various infections, most of them respiratory, including acute pharyngitis and tonsillitis, otitis media, sinusitis, acute and chronic bronchitis, asthmatic bronchitis, bronchiectasis, bronchial pneumonia, and lobar pneumonia. Response was judged good or satisfactory in more than 84% of the total cases.

Each month there are more and more reports like this in the literature, documenting the great worth and versatility of ACHROMYCIN. This antibiotic is unsurpassed in range of effectiveness. It provides rapid penetration, prompt control. Side effects, if any, are usually negligible.

No matter what your field or specialty, ACHROMYCIN can be of service to you. For your convenience and the patient's comfort, Lederle offers a full line of dosage forms, including

ACHROMYCIN SF

ACHROMYCIN with STRESS FORMULA VITAMINS. Attacks the infection—defends the patient—hastens normal recovery. For severe or prolonged illness. Stress formula as suggested by the National Research Council. Offered in Capsules of 250 mg. and in an Oral Suspension, 125 mg. per 5 cc. teaspoonful.



For more rapid and complete absorption.

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dry filled sealed capsules

¹January, H. L. et al: Clinical experience with tetracycline, Antibiotics Annual 1954-55, p. 625.



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PHYSICIANS CASUALTY AND HEALTH ASSOCIATIONS OMAHA 2, NEBRASKA

The Washington Scene

A monthly news summary from the nation's capital by the Washington Office of the A.M.A.

In terms of actual health bills passed and sums of money appropriated, the 84th Congress which ended just a few weeks in advance of party presidential conventions undoubtedly set some records. Measures ranged from the far-reaching program of disability cash payments to a bill for the commissioning of male nurses in the armed services.

In between are a wide variety of measures which, in the opinion of Secretary Folsom, Secretary of Health, Education and Welfare, gives "promise of immediate and substantial progress on a wide front in the improvement of the nation's health."

Both Mr. Folsom and the President deplored the fact that Congress had not acted on their plan for federal aid to medical schools, but Congress decided this was one of the subjects that needed more study before taking any further action. In addition Mr. Folsom expressed disappointment that nothing had been done on authority for pooling arrangements among small health insurance companies and the long-dormant plan for a health reinsurance fund.

On medical research funds, the administration this session asked for the largest amount ever requested in one year. The appropriation finally voted was even larger, some \$170 million. On top of this, Congress in its final hours appropriated nearly \$80 million to carry out new legislation just passed.

Here are the highlights of major health bills approved by the 84th Congress:

Social Security Amendments—Changes in the 21 year-old social security law now include (1) Old Age and Survivors Insurance payments to disabled workers at age 50, paid from a "separate" fund, (2) extension of social security to some 250,000 dentists, lawyers, osteopaths and other self-employed persons, (3) lowering of retirement age for social security purposes for women from 65 to 62, (4) earmarked payments for medical care of public assistance recipients, and (5) increase of pay roll deductions by one-half of 1 per cent and three-eighths of 1 per cent for the self-employed.

Laboratory Research Facilities—The Hill-Bridges bill for \$90 million in construction grants over three years to public and non-profit institutions to erect research facilities started out in the Senate as a bill to aid research in crippling and killing diseases, but wound up for research in all "sciences related to health."

Health Amendment Act—The so-called little omnibus health bill provides for federal grants for training of public health specialists, professional nurses qualified for teaching and administrative jobs and for practical nurses—plus a two-year extension beyond next July 1 of the 10-year-old Hill-Burton hospital program, and special projects grants for mental health studies and demonstrations.

Medical Care for Military Dependents—A longsought goal of the Defense Department was enactment of a permanent program of medical care for dependents of armed services personnel either in military hospitals and clinics or through private sources. It is scheduled to begin early in December.

National Library of Medicine—Another proposal long in the making was the re-establishment of the Armed Forces Medical Library as the National Library of Medicine. For administrative purposes, Congress put it under the Department of HEW, but left up to the 17-man board of regents the selection of site—in all likelihood in the Washington area.

Sickness Survey—Special and continuing surveys on the extent of illness and disability in the U. S., along with medical care being offered have been authorized—the first detailed study of its kind in over 20 years. The work will be done by the Public Health Service.

Water Pollution Control—The PHS is authorized to make grants to states and communities to help in construction of sewage disposal plants, at the rate of \$50 million a year for 10 years.

Some other measures signed into law by the President were: Establishment of a mental health program for Alaska, budget increases for additional staff for the Food and Drug Administration along with a new headquarters building for modern laboratories, provision of medical care for employees and dependents of the State Department abroad in U. S. military facilities, a \$400,000 fund to finance the holding of the World Health Assembly in this country in 1958 (which is the 10th anniversary of the founding of the World Health Organization) and the commissioning in the armed services of osteopaths.

Notes:

The new surgeon general of the PHS is Dr. Leroy E. Burney, a career officer in the commissioned corps and for 10 years commissioner of health for the State of Indiana. Until his nomination by the President he was deputy chief of the PHS Bureau of State Services. Dr. Burney received his medical degree from Indiana University.

The federal government withdrew from the allocation of the Salk poliomyelitis vaccine just 15 months after the first release of the vaccine, but federal grants to states to help finance inoculation programs continues.

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Cook County Graduate School of Medicine

INTENSIVE POSTGRADUATE COURSES STARTING DATES—SUMMER AND FALL, 1956

SURGERY—Surgical Technic, Two Weeks, October 29, November 25. Surgical Anatomy & Clinical Surgery, Two Weeks, October 1. Surgery of Colon & Rectum, One Week, October 15. General Surgery, One Week, October 22. Thoracic Surgery, One Week, October 1. Esophageal Surgery, One Week, September 24. Breast & Thyroid Surgery, One Week, October 22. Galibladder Surgery, 3 days, October 29. Fractures & Traumatic Surgery, Two Weeks, October 15.

GYNECOLOGY & OBSTETRICTS—Obstetrics & Gynecology, Three Weeks, October 22. Vaginal Approach to Pelvic Surgery, One Week, October 15.

MEDICINE—Electrocardiography & Heart Disease, Two-Week Basic Course, October 8; One Week Advanced Course, September 17. Internal Medicine, Two Weeks, September 24. Gastroenterology, Two Weeks, October 22. Dermatology, Two Weeks, October 15. Cardiology (Pediatric), Two Weeks, November 5.

RADIOLOGY—Diagnostic X-Ray, Two Weeks, November 26. Clinical Uses of Radioisotopes, Two Weeks, October 8.

UROLOGY—Two-Week Course October 8. Cystoscopy, Ten Days, by appointment.

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ORGANIZATION



BOULDER COUNTY MEDICAL SOCIETY PICNIC

On Thursday, August 9, the Boulder County Medical Society was host to a very enjoyable picnic. This picnic was held at the Boulder Country Club on the site of the future Country Club Dining Room. Mr. Tucker and his ciub staff served a very delicious fried chicken dinner to over 90 Medical Society members and guests.

Guests at the picnic included the County Commissioners, the Mayors of Longmont and Boulder, and a number of business and professional people, together with their wives.

The primary purpose of the picnic was to foster good public relations between the medical profession and the public at large.

Following the picnic dinner, a panel discussion was presented during which it was the objective of the various speakers to "Take a Look at Medicine."

The first speaker on the panel was John Mackie of Longmont, a member of the State Legislature. He dwelt at some length on the medical practices act which is designed to keep the standards of medical practice at a high level. He stated that this act should be modified so that when the Board of Medical Examiners revokes a physician's license, that doctor should not be able to continue to practice medicine. The act is designed to keep out quacks and yet, at the same time, not allow a monopoly in the practice of medicine. It guarantees that the individual doctor shall be the only one allowed to practice medicine. He stated that it is easy for governmental agencies to take away a person's free choice of his own physician. If this free choice is taken away, the individual loses a portion of his freedom. We must continue to fight to keep corporations out of the practice of medicine. It is the individual's duty to keep the legislators informed of the needs of medicine and of the needs for institutions of learning and medical care. Mr. Mackie stated that all doctors are responsible for keeping and promoting good public relations and thus, in so doing, to inspire confidence in medical practice.

The second speaker on the panel was Mr. Harold Eichman, Assistant Superintendent at the Boulder-Colorado Sanitarium and Hospital. Mr. Eichman presented a very interesting comparison



Striking relief from nausea of pregnancy

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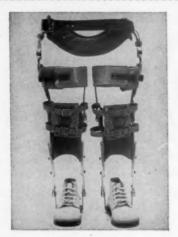
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"...permit ingestion of
enough salt to make food
palatable; without them,
many patients would lose
their appetites, a consequence of the salt-free diet
which has occasionally been
known to cause serious
malnutrition."*

*Modell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, pp. 265-266.

ness in the neighborhood of \$250,000.00 and showed a profit of \$19.27. No other type of business in our system of free enterprise could afford to show such figures as this, of course. In 1946, the average hospital room cost \$7.00 per day, and today it costs \$17.00 per day. Today it costs the hospital about \$25.00 to care for a patient for 24 hours.

Mr.' Eichman showed the comparisons in 1946

of the costs of hospitalization in 1946 and 1956. He stated that in 1946 the Sanitarium did a busi-

Mr.' Eichman showed the comparisons in 1946 as being not too different from hospital costs for the patient's total bill for the year 1956. The difference lies in the fact that the average patient's stay in the hospital is much shorter today than it was 10 years ago, so that even though the daily costs are higher, staying in the hospital a shorter time results in his bill being approximately the same as 10 years ago.

The third panel member was Rev. E. F. Loessel of Longmont. Rev. Loessel spoke of the importance of unraveling the laws of nature in order to make them available for use of the sick. He stated that the minister's job is most important in helping to heal the soul as it is the physician's job in helping to heal the body. He spoke of St. Luke as being both a physician and an evangelist. It has been said that the Christian physician can get at the thoughts of the people better than can the Christian lawyer, businessman, or even the Christian pastor.

The role of the doctor's wife was presented most capably by Mrs. J. S. Haley, wife of Dr. Haley of Longmont. Mrs. Haley is at present the president of the Women's Auxiliary to the Colorado State Medical Society.

Mrs. Haley stated that the role of the doctor's wife is a most difficult one. She must look prosperous, yet not too prosperous, else no one will ask for her husband's services. She is expected to be well informed on all medical matters, yet she must know nothing about the latest treatments when the doctor's patient calls on the telephone.

The Medical Auxiliary's program includes stimulation of the interest of girls at the high school level for the profession of nursing. The Medical Auxiliary promotes interest in the American Medical Education Foundation. As a result of the Auxiliary's activities, there have been large contributions made to medical education in this country. The Auxiliary promotes publicity regarding the high cost of medical education and fosters the circulation of the publication, "Today's Health," the authorized magazine of the American Medical Association.

The Medical Auxiliary promotes interest in legislation at all levels pertaining to the medical profession. It also extends its efforts toward good public relations for the medical profession.

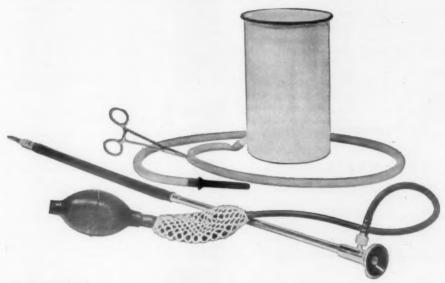
The last speaker on the panel was Dean Edward King of the Law School at the University of Colorado. Dean King stated that, as it is with

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ANXIETY

is part of

GASTROINTESTINAL DISORDERS



In every patient . . . a valuable adjunct to the customary therapy

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Licensed under U.S. Patent No. 2,724,720



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* Economical... * Convenient... * Effective ... * Reliable...

Easily Administered - A Proven Product Biologically standardized aqueous solution of highest purity Federal contract item #GS-03S-17537

For subcutaneous, intravenous, or intramuscular use

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Potency: Each ml. exhibits a biological activity equiva-lent to that of 100 mcgms. of U.S.P. reference standard hydrocortisone.

Adrenalex offers a normal unaltered spectrum of corticords and is recommended for use in all hypoadrenal conditions.

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Literature and information upon request



the lawyers, when he thinks of doctors as a group, he has a rather low opinion of them. But when he thinks of his own doctor there is no one who rates higher in his estimation. He stated that, as it is with lawyers, there are excellent doctors and poor ones. Some lawyers are spoken of as "lawyers' lawyers"; this is also true with physicians. The law schools are turning out excellent lawyers, but at times there is a question about how the lawyers rate as citizens. Dean King stated that he did not intend to offer any critical comments regarding the medical profession as any such comments would apply equally to his own profession.

Audience participation was encouraged, and many interesting and informative comments and questions were discussed.

Dr. Joel R. Husted was moderator for the panel and the general discussion.

A short business meeting was held by the Medical Society, in which four new members were admitted to the Boulder County Medical Society. These were Dr. Wallace LaBaw of Broomfield Heights; Dr. Robert Bolander, whose office is in the First National Bank Bldg.; Dr. John Farrington, with offices at 24th and Arapahoe, and Dr. Richard Roos, also with offices at 24th and Arapahoe, Boulder.

> C. O. ROBERTS, M.D., President.

Obituaries

J. E. NAUGLE

Word has been received of the death of Dr. Naugle on June 16, 1956.

Dr. Naugle was born in Carson, Iowa, in 1885 and received his M.D. degree in 1910. He practiced in Sterling, Colorado, after 1910. He was a fellow of the American Medical Association and a member of the Colorado State Medical Society.

WILLIAM T. H. BAKER President, Colorado State Medical Society, 1937-1938

Dr. Baker passed away after a prolonged illness in Pueblo, He was born in 1871 in Illinois and graduated from Northwestern University

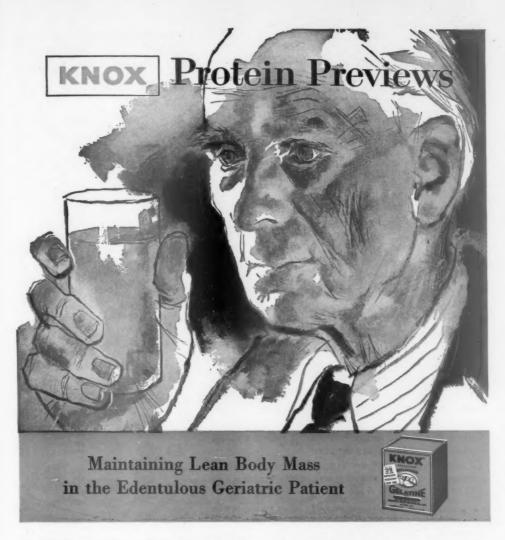
Medical School in 1896. Dr. Baker established his practice in Colorado in the same year and practiced until his re-tirement in 1952. Many years of active participation in Society affairs culminated in his elec-President tion as 1937

Dr. Baker was a member of the Colorado State Medical Society, Pueblo County Medical

sociation. Among his survivors are his wife and a son, Dr. W. N. Baker of Pueblo.

LEWIS I. MILLER

Dr. Miller, who was born in Denver in 1894, died of a heart attack while driving his automo-



Extensive loss of body protein can occur in either the spare or obese geriatric patient. But whatever the patient's somatotype, a decrease in lean body mass is usually the result of inadequate protein intake due to poor dentition, slowed-down digestion and quite frequently, unappetizing main dishes.

Knox Gelatine is an excellent non-residue protein which is easy to chew and readily digested and assimilated. As a vehicle for many foods, Knox Gelatine brightens bland diets, giving a new interest to jaded appetites. As a concentrated protein drink, Knox Gelatine supplies seven out of eight essential amino acids and a majority of the other amino acids composing protein. Specific suggestions on how to use Knox Gelatine in different types of geriatric diets are described in the booklets listed in the coupon below.

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Indicate number o for your patients o	f special diet booklets desired pposite title:
GERIATRIC	
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The Geriatric Diet strikes a happy balance!

Your elderly patient may narrow down his food range to the point where foods high in protein, vitamins, and minerals are virtually eliminated. These ideas may help you show him how to enjoy a better-balanced diet.

These are essential—

Meat is as important now as ever. Fish steaks, chicken parts, chops, or cutlets can be bought in small portions. And adding skim milk powder to hamburger boosts both protein and calcium.

Plenty of fruits and vegetables mean adequate vitamins in proper balance. Chopped or strained vegetables and canned fruits are easy to chew. Salads need no cooking—but a sprig of parsley isn't enough.

Be sure the fluid intake is liberal. And remind your patient that it need not necessarily be water.

These are for fun-

Good company and a pretty plate make a happy combination. But if your patient eats alone, a tray in a sunny window makes all outdoors the guest.

A one-dish casserole gives free rein to the imagination and cuts down dishwashing. But perk up flavor with spices and herbs.

A glass of beer* before dinner often leads to improved appetite. And another glass at bedtime may induce a better night's sleep.

The number of people over 60 is still on the upswing. And with proper attention to diet, these added years can be made more profitable and happy both for the elderly and their families.



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*Sodium 17 mg, Calories 104/8 oz. glass (Average of American Beers)



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for preventing and treating upper respiratory infections



ACHROCIDIN provides in one tablet all the drugs which are often prescribed separately for the prevention and treatment of cold complications - conditions such as otitis, adenitis, sinusitis, and others. This comprehensive formula 1) provides potent therapeutic and prophylactic action against a wide variety of infective organisms, 2) relieves pain and discomfort, 3) depresses fever, 4) alleviates

Available on prescription only

nasal congestion.

ACHROMYCIN® Tetracycline	125 mg.
Phenacetin	120 mg.
Caffeine	30 mg.
Salicylamide	150 mg.
Chlorothen Citrate	25 mg.
Bottle of 24 tablets.	

Average adult dose: 2 tablets, 4 times daily



LEDERLE LABORATORIES DIVISION, AMERICAN CYANAMID COMPANY, PEARL RIVER, NEW YORK

a potent germicide for cold sterilization PHENEEN®



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Rapid germicidal activity plus specific sporacidal properties enable PHENEEN to provide the extra margin of safety during minor office surgery. Instruments may be stored for months in PHENEEN without weekly changes of solution. Special "built-in" rust inhibitant makes this possible. Routine use of colorless, adorless PHENEEN reduces questionable sterility to the minimum. For complete information and prices write . . . RM-956.

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bile August 13. He received his medical education at Stritch Medical School, graduating in 1918. He was licensed to practice medicine in Illinois and Colorado. Dr. Miller helped found Colorado Hospital Service and the Beth Israel Hospital and was active in many other civic projects. He is survived by his wife, a daughter and five grand-children.

NORBERT H. KNOCH

Dr. Knoch died in Glenwood Springs Hospital after an illness of one week. He was 67 years old. He received his preliminary and medical education in Denver, graduating from Gross Medical College in 1910. Dr. Knoch practiced medicine in Denver from 1911 until his retirement in 1952 and was a member of the Colorado State Medical Society, Denver Medical Society and the American Medical Association. Surviving is his wife.



WESTERN MONTANA MEDICAL-SURGICAL CONFERENCE

The 1957 meeting of this conference will be held June 29 at the Florence Hotel, Missoula, it was announced by Dr. Harold A. Braun of Missoula, Chairman of the Program Committee.

Obituary

A. N. SMITH

Alfred Nelson Smith, M.D., Glasgow, died June 22, 1956, in a Havre hospital. Dr. Smith was born in Wheatland, North Dakota, on May 27, 1883. He graduated from Northwestern University Medical School in 1911 and, after practicing a short time in North Dakota, moved to Glasgow, Montana, where he practiced for forty-four years. He had been a member of this association and the AMA for thirty-two years.



NEW MEXICO PHYSICIANS' SERVICE ELECTS OFFICERS

New Mexico Physicians' Service, the Prepaid Medical and Surgical Insurance Plan of the New Mexico Medical Society, has elected Dr. Wendell H. Peacock as its President. Dr. Peacock, Farmington, general practitioner, succeeds Dr. John F. Conway of Clovis, who served for ten years as President of the New Mexico Plan.

(Continued on page 840.)



ORAL PENICILLIN FOR <u>BETTER</u>

AND MORE CONSISTENT ABSORPTION

"Because of the better and more consistent absorption of penicillin V from the intestinal tract, it would appear that this type of penicillin is preferable to penicillin G when oral administration is to be used."

 Martin, W. J., et al.: J.A.M.A. 160:928 (March 17) 1956. PEN•VEE•Oral and PEN•VEE Suspension permit new dependability in oral-penicillin therapy—dependable stability in gastric acid, dependable and optimal absorption in the duodenum. "Not being destroyed by acid in the stomach, as is penicillin G, penicillin V remains available in larger amounts for absorption."

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PEN·VEE·Oral is Penicillin V, Crystalline (Phenoxymethyl Penicillin) PEN·VEE Suspension is Benzathine Penicillin V Oral Suspension

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Meat...

and Its Place in the Diet in Congestive Cardiac Failure

Meat has an appropriate place in the moderateprotein, low-sodium, acid-ash diet advocated in the dietary management of patients with congestive cardiac failure. When extreme sodium restriction is necessary, the meat allowance is regulated accordingly.

Lean meat allows maintenance of a positive nitrogen balance without excessive protein intake, because its amino acids match the quantity and proportions needed for tissue synthesis and repair.^{2,3} In the fresh state as purchased it supplies only small amounts of sodium ranging from approximately 50 to 100 mg. per 100 grams. Due to its acid-ash composition (equivalent to 4 to 38 ml. of normal acid per 100 grams of meat) it may facilitate diuresis.¹

In addition to these important features, meat contributes valuable nutritional factors by virtue of its generous supply of high quality protein, B vitamins, and essential minerals—iron, phosphorus, potassium, and magnesium.

Easy digestibility, a prime requisite of foods eaten by the patient with congestive cardiac failure, is another outstanding quality of meat.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

American Meat Institute
Main Office, Chicago... Members Throughout the United States

Odel, H. M.: Nutrition in Cardiovascular Disease, in Wohl, M. G., and Goodhart, R. S.: Modern Nutrition in Health and Disease, Dietotherapy, Philadelphia, Lea & Febiger, 1955, p. 709.

^{2.} Berg, C. P.: Utilization of Protein, J. Agr. & Food Chem. 3:575 (July) 1955.

Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, Williams & Wilkins, 1955, p. 638.



A tranquilizer well suited for prolonged therapy NO ORGANIC CONTRAINDICATIONS reported to date

- well tolerated, non-addictive, essentially non-toxic
- no blood dyscrasias, liver toxicity, Parkinson-like syndrome or nasal stuffiness
- chemically unrelated to chlorpromazine or reserpine.
- does not produce significant depression
- orally effective within 30 minutes for a period of 6 hours

Indications: anxiety and tension states, muscle spasm.

Miltown

THE ORIGINAL MEPROBAMATE

DISCOVERED AND INTRODUCED by Wallace Laboratories, New Brunswick, N. J.



2.methyl-2-n-propyl-1,3-propanediol dicarbamate—U. S. Patent 2,724,720 SUPPLIED: 400 mg. scored tablets. Usual dose: 1 or 2 tablets t.i.d.

Literature and Samples Available on Request

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Improved Antiseptic Douche Powder

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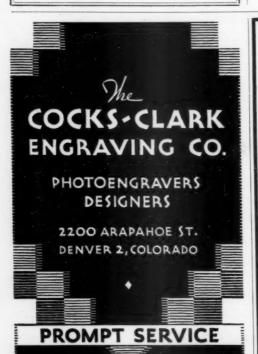
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*Moyer, J. H., and others: J. Chronic Dis. 2:670, 1955.

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*Bonica, J.J.; and Backup, P.H.: Northwest Med., 54:22, Jan. 1955.

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Dr. Omar Legant was elected Vice President and Dr. Fred Hanold, Secretary-Treasurer. Both doctors are from Albuquerque.



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The University of Wyoming is seeking a Director for its Student Health Service. The present Director is nearing retirement age. Salary would be approximately \$10,000 to \$11,000 per annum with a month vacation and some other perquisites, details of which can be obtained from President G. D. Humphrey, University of Wyoming, Laramie. Wyoming licensure required.



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President Eisenhower's Committee on Employment of the Physically Handicapped has given the American Medical Association a memorial plaque honoring the late Dr. Carl M. Peterson for his lifetime devotion "to the increased health, welfare and employment opportunity of his fellowmen."

Dr. Peterson was secretary of the A.M.A.'s Council on Industrial Health for seventeen years and served as chairman of the Medical Committee of the President's Committee. He died last fall of injuries suffered in a plane crash in North Carolina.

The plaque was presented before the House of Delegates during the A.M.A.'s 105th Annual Session in Chicago by Dr. Ross T. McIntire, former chairman of the President's Committee and retired Surgeon General of the Navy. It was accepted on behalf of the Association by Dr. William P. Shepard, New York, chairman of the Council on Industrial Health.

The plaque reads in part: "As Secretary, Council on Industrial Health, American Medical Association, he was the pivot around which many of the great advances in industrial medicine centered in the past two decades. Our country and her handicapped men and women of today and tomorrow have much for which to thank this tireless man whose untimely death in the performance of duty saddened all those who knew him."

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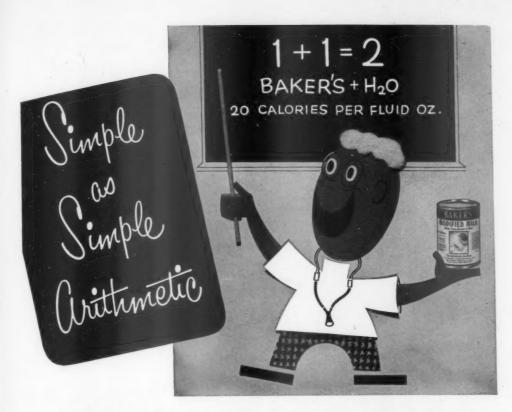
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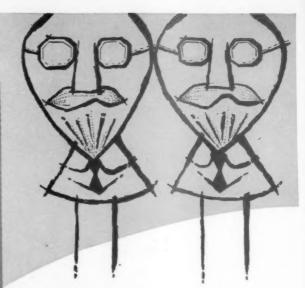
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SOME DOCTORS MISS THIS TREAT

The 75 per cent of doctors in general practice who disagreed with the statement, "Compared with their patients, most doctors make too much money," in the poll, "What Americans Think of the Medical Profession," last year apparently agree with the statement that "wealthy doctors, like all wealthy people, miss one of the greatest thrills in life—paying off that last installment!"—Minnesota Med.

OPPORTUNITIES IN PUBLIC HEALTH

The attention of physicians who will complete their internships in 1956 is called to the opportunities now open in public health in Pennsylvania. With the active support of the state and various county medical societies, the idea of a county department of health is spreading. The State Department of Health also has vacancies for medical officers on its own staff.

To have physicians ready for such openings, the State Department of Health, through its Division of Professional Training, has a career development program designed to prepare the young doctor for his board examinations in preventive medicine.

Any young physician interested in public health as a specialty is invited to write for further information to Dr. Berwyn F. Mattison, Secretary, State Department of Health, Harrisburg, Pennsylvania

POSTDOCTORAL FELLOWSHIPS AVAILABLE

The National Foundation for Infantile Paralysis announces that postdoctoral fellowships are available for full time study in preparation for careers in research and/or academic medicine, or in the clinical fields of psychiatry; rehabilitation; orthopedics; the management of poliomyelitis and preventive medicine.

All awards are made upon recommendation of the appropriate National Foundation Fellowship Committee. Partial fellowships are available for qualified veterans to supplement G.I. educational benefits.

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HENRY B. TURNER, M.D., Obstetries, Ass't. Professor, Division of Obstetrics & Gynecology, University of Tennessee College of Medicine, Memphis, Tennessee.

HAROLD W. ELLEY, Ph.D., Chairman, Research Study Committee, National Association of Mental Health, and Technical Director (Retired), E. I. duPont de Nemours & Co., Inc., Wilmington, Delaware

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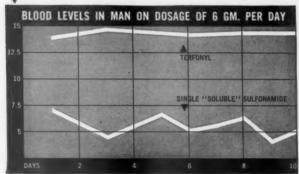
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4tter Liter, D., Modern Med. 23:111 (Jan. 15) 1955.

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Two to three-month fellowships are available for medical students for study in research, public health and preventive medicine, or rehabilitation. This program is administered by the Foundation through the Deans of the approved medical schools to whom inquiries should be addressed.

Further information may be obtained by writing to the Division of Professional Education, The National Foundation for Infantile Paralysis, 120 Broadway, New York 5, New York.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY, INC.

The next scheduled examination (Part I), written, and review of case histories for all candidates will be held in various cities of the United States and Canada, and military centers outside the Continental United States, on Friday, February 1, 1957.

Candidates must submit case reports to the office of the Secretary within thirty days of being notified of their eligibility to Part I.

Request for re-examination in Part II must be received prior to February 1, 1957.

Current bulletins may be obtained by writing to Robert L. Faulkner, M.D., Secretary, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.



New Books Received

New books received are acknowledged in this section. From these, selections will be made for reviews in the interests of the readers. Books here listed will be available for lending from the Denver Medical Library soon after publication.

Symposium on Histamine, in honor of Sir Henry Dale: By Ciba Foundation. Boston, Little, Brown & Co., 1956. Price: \$9.00.

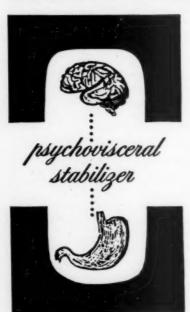
Anatomy for Surgeons, Vol. 2. The Thorax, Abdomen and Pelvis: By W. Henry Hollinshead. N.Y., Hoe-ber-Harper, 1956. Price: \$20.00.

Textbook of Urology: By Victor F. Marshall. N.Y., Hoeber-Harper, 1956. Price: \$5.50.

A Manual of Practical Obstetrics: By O'Donel Browne and J. G. Gallagher. 3d ed. Bristol, John Wright & Sons, Ltd., 1956. Price: \$7.50.

Essential Urology: By Fletcher H. Colby. 3d ed. Baltimore, Williams & Wilkins, 1956. Price: \$8.00.

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Clinical Urology: By O. S. Lowsley and T. J. Kirwin. 3d ed. 2 vols. Baltimore, Williams & Wilkins, 1956. Price: \$32.50.

Radiology of the Heart and Great Vessels. (Chapter IV of Golden's Diagnostic Roentgenology): By Robert N. Cooley and Robert D. Sloan. Baltimore, Williams & Wilkins, 1956. Price: \$15.00.

Book Reviews

Clinical Recognition and Management of Disturb-naces of Body Fluids: By John H. Bland, M.D. 2nd ed. Philadelphia, W. B. Saunsers, 1956. Price:

John H. Bland, M.D., in the second edition of his book, DISTURBANCES OF FLUID BAL-ANCE, attempted to revise his first edition, but found it became too cumbersome, so he rewrote the entire book, and added some chapters. Since the first edition, there have been some interesting papers calling attention to our concept of fluid balance, and changing this concept so that we are more concerned with the hydrogen ion than the acid base balance. This newer concept of fluid balance is meant to be clearer in the long run, but it does entail that anyone, before attempting fluid balance problems, should under-stand some of the basic concepts of the hydrogen ion concentration. He has added three new chap-ters on: (1) Pathology and Physiology of Water and Electrolyte Metabolism and the Diseases of the Liver, (2) Pulmonary Disease, and (3) the Metabolic Consequences of Head Injury. The book, with its renewed emphasis on the Clinical Aspects of Diagnosis and Fluid Balance Prob-lems, is very valuable, and anyone attempting to delve into these problems and work on patients with these problems should have a very good understanding of this book. If he does attempt

to read this book, I am certain he will find it very fascinating.

EDWARD L. BINKLEY, JR., M.D.

Physicial Diagnosis: By Ralph H. Major, M.D., and Mahlon H. Delp, M.D. 5th edition. Philadelphia, W. B. Saunders Co., 1956. 358 p., illus. Price: \$7.00.

The new double-column format of this standard text makes it more pleasant reading. The material has been brought up to date and supplemented with new advances. The illustrations are superb, and a novel feature is the use of a device of drawing the examiner with the patient

in the demonstration of diagnostic maneuvers.

Practical size is retained by limiting material to strict diagnosis rather than attaching sections on clinical pathology, x-ray, electrocardiography,

Those who want a new book on physical diagnosis should be sure to see this new edition.

W. GRAYBURN DAVIS, M.D.

The Neuroses in Clinical Practice: By Henry P. Laughlin, M.D. Phila., W. B. Saunders Co., 1956. Price: \$12.50.

This book will be of help to many people in the general practice of medicine as well as in their training in psychiatry. It answers almost any question a person might ask about the neuroses, as well as some ramifications of the "normal" person. The author presents an abundance of information in a well-organized manner. He believes the basic conflict in neurosis anxiety, and thus he opens the book with a very good and thus he opens the book with a viring is fresh, chapter on that subject. His writing is fresh, clear, and colorful in style, and he shows a wide clinical experience and intense interest in the

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JAMES J. O'NEIL, M.D., Director of Clinics 1031 Medical Arts Building, Omaha, Nebraska human and his behavior. He has numerous case histories which are most illustrative and are very concise.

The author presents some new facets in psychiatry, particularly that of the "Soteria" which he has used as the term for a counter-phobia. He also uses the terms "endgain," meaning the primary gain of emotional illness, and "epigain," the unconscious secondary gain of emotional ill-

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ness. These terms are rarely used except in this book. His chapters on the neuroses have parallel structure; they contain sections on introduction, history, diagnosis incidence, symptoms and clinical features, psychodynamics and pathogenesis and treatment. Additional sections of each chapter are entitled "Additional Aspects" which include discussions of features tengential to the reaction described.

The basic defects of the book are that at times he presents the description of a neurosis in such simple language that you almost feel insulted, and then later in the chapter he presents the dynamics in such deep and psychoanalytical terms that the general practitioner may become confused and discouraged in attempting to understand the concepts presented. An important detail of the book is that each chapter is followed by an extensive list of references which is extremely valuable. Also, there are two appendices, one presenting a brief outline classification of emotional and mental illness, and the other presenting a glossary of some 1500 terms labeled "A Glossary of Psychiatric Concepts and Terms."

WILLIAM W. McCAW, JR., M.D.

Gynecologie Cancer: By James A. Corscaden, M.D. 2nd edition. Baltimore, Williams & Wilkins, 1956. Price: \$10.00.

An excellent and comprehensive treatise on gynecologic cancer, as was the first edition, this volume is notable for several things, all good. Every subject is discussed completely yet succintly. Controversial matters are discussed rather than passed by in an opinionated way. The amount of space given to various malignancies follows closely upon the importance and incidence of these types of malignancies. The recent advances in diagnosis and therapy are well covered. All in all it is an excellent book on an important subject.

JOHN R. EVANS, M.D.

Synopsis of Gynecology: By Robert James Crossen, M.D. 5th edition. St. Louis, C. V. Mosby Co., 1956. Price: \$5.25.

This fourth edition follows the same excellent organization as the previous editions. Primarily for use by students, it is nevertheless a handy and time-saving source of reference for the practitioner. It should be on the desk of every general practitioner whose practice includes gynecology.

JOHN R. EVANS, M.D.

A Manual of Practical Obstetries: By the late O'Donel Browne. Edited and largely re-written by J. G. Gallagher. 3d edition. Bristol, John Wright & Sons, Ltd., 1956. Price: \$7.50.

This is undoubtedly a manual for students and general practitioners. It is short, to the point, and well organized. The format is handy and the printing and illustrations are well done. It would find limited use in this country, since foreign techniques are at some variance with our own.

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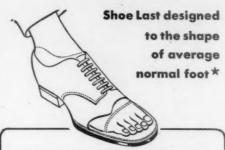


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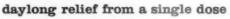


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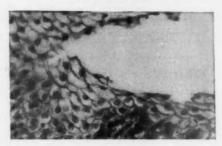
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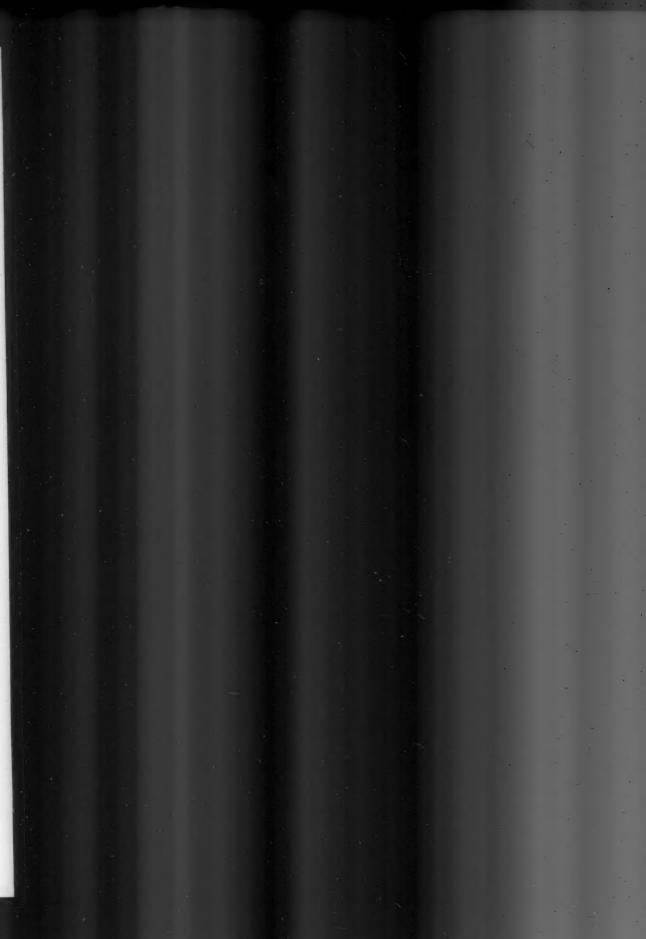


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